A Neighbor's Guide to the Blue Ridge Parkway

A how - to manual for building along the Parkway

HILL STUDIO
Community Planning, Landscape Architecture,
Architecture, Preservation















A Neighbor's Guide to The Blue Ridge Parkway

Virginia and North Carolina

The Blue Ridge Parkway Foundation

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David P. Hill, ASLA, Principal Author

Blue Ridge Parkway contributors:

Gary Johnson, Chief, Planning and Professional Services
J. David Anderson, Park Landscape Architect

Hill Studio contributors:

Laurice Ellsworth
Seth Estep
Peter Giraudeau
Hunter Greene
Chris Henry
Patrick Hughes
Chris Lawrie
Marshall McMillan-Zapf
Amy Saunders
Evie Slone
Sandy Thompson
Greg Webster
Emma Wilkinson

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Regarding this publication, please contact:

David P. Hill, ASLA
Hill Studio
120 West Campbell Avenue
Roanoke, VA 24011
davidhill@hillstudio.com

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Chapter 1

Introduction: It's All About the View

Welcome to building along the Blue Ridge Parkway. If you are reading this book you are probably one of the many neighbors of the Blue Ridge Parkway. Maybe you are one of the 4,500 landowners whose properties abut the Parkway, or maybe you are one of the million people who live within a few miles.

When the planning and construction of the Parkway began in the 1930s, Parkway designers located roadside vistas and overlooks to showcase views of the forested mountains and rural farmsteads along the Parkway route. Those views are borrowed from the adjacent scenery to share with over 20 million visitors each year that travel the Parkway. As a Parkway neighbor you have an important role in preserving the scenic beauty of the Parkway's borrowed landscape.

The Blue Ridge Parkway is known internationally as one of the most scenic drives in America. Your property that can be seen from an overlook or roadside vista contributes to the scenic views from the Blue Ridge Parkway. There are many things you can do through careful design to help maintain the scenic quality of Parkway views and better preserve this landscape.

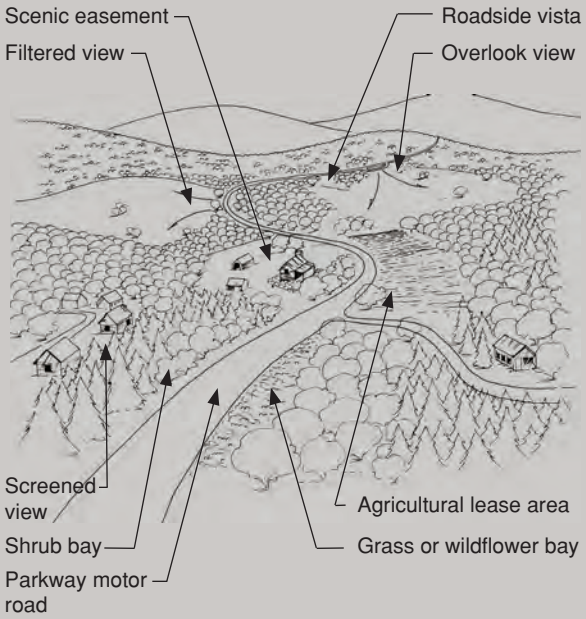
"What is the Blue Ridge Parkway? Is the Parkway a road, or is it the land the National Parks Service owns around the road, or is it something else altogether?"

Of course, it's all three, and more. The reason for Neighbors Guide to the Blue Ridge Parkway is that the Parkway is more than a 20' slab of asphalt, and more than the slim corridor owned by the Park Service. The Blue Ridge Parkway is "something else altogether." It is America's most-visited park; it is the largest work of American landscape architecture, it is an economic engine for the highlands of Virginia and North Carolina. To some extent, it is even a brand for the highland region. But that's not all. For many visitors, it is an experience. It is a journey through an inspirationally-scenic region, providing around every bend or over every hill a new scene of not only how things are, but how things are supposed to be.

Travelers might believe this experience is 473 miles of pure lucky scenery, but it is actually the result of lifetimes of hard work by a remarkably dedicated group including Parkway employees, local government planners, advocates, and neighbors, including the 4700 adjacent property owners who made this experience and have kept it extraordinary for 75 years. Beginning in the 1930s, a band of talented designers was led by landscape architect Stanley Abbott, to create a new type of National Park, where the land did not have to be owned by the Park Service in order for people to enjoy the experience. Visitors would instead be treated to a cinematic journey of managed American countryside.

This book packages for you many of the issues considered by these planners and land managers. Your house and your land is part of the Parkway experience. Implementing the guidelines in this book makes your house and your land more marketable, more sustainable, and more fitting within the Blue Ridge landscape. You may not have sought this distinction, but if you are a neighbor, your land is part of the Parkway experience for 20 million visitors per year! So, that's the Parkway, and that's why we have a Neighbor's Guide to the Blue Ridge Parkway.

Landscape Features



Enabled by Congress as America's Scenic Parkway, the Blue Ridge was intentionally planned from the outset to lack the impression of a boundary line. Designers "borrowed the scenery" from the adjacent farms and mountains, and presented it through a variety of views that blended the Park with the countryside. Today, Parkway landscape architects continue this tradition by management of land and cooperative planning.

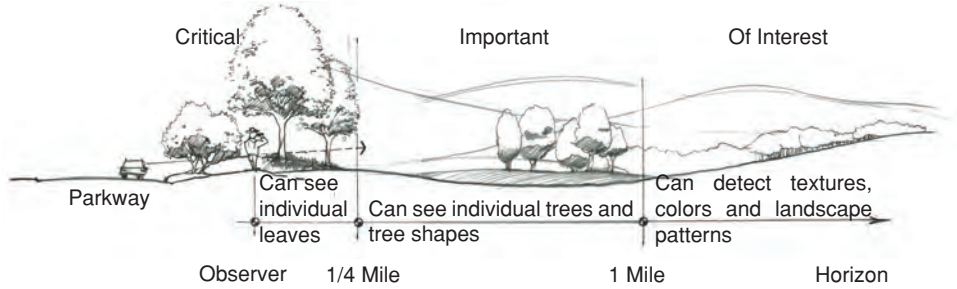
During its design, each vista visible from the parkway roadbed was carefully studied in the field and selected by the designers to feature the special landscape qualities of the Virginia and North Carolina highlands. Parkway designers developed a series of land regulation techniques, such as scenic easement restrictions, deed reserved access, and life estates to blend the Park-owned land with the pastoral countryside, and crafted a palette of landscape details and architectural building traditions to create a cinematic experience for visitors traveling the Parkway. Forests, open fields, clustered settlements, farm buildings, houses, roofs, stone walls and rail fences all contribute to the special visual characteristics of the Parkway. This remarkable design is one of the reasons the Blue Ridge Parkway is perennially America's most visited unit of the National Park Service. Today, it is important for neighbors to understand the original design concepts in order to identify and preserve significant vistas, and to sustain the quality of the visual experience for residents and visitors.



View of the highland landscape from the Blue Ridge Parkway. (J. David Anderson.)

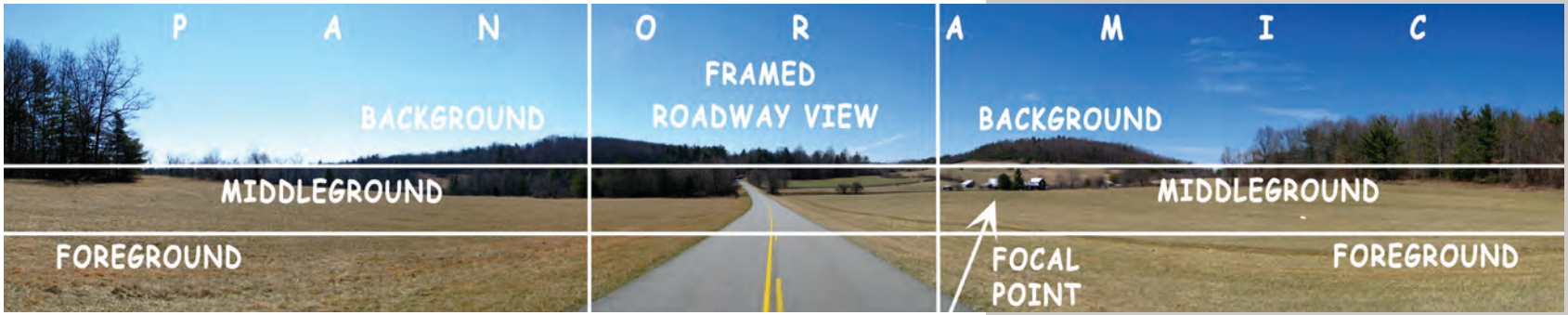
Your Backyard is the Parkway's Front Yard

- J. David Anderson, 2008



The distance an object is from the viewer relates to its importance in the scene.

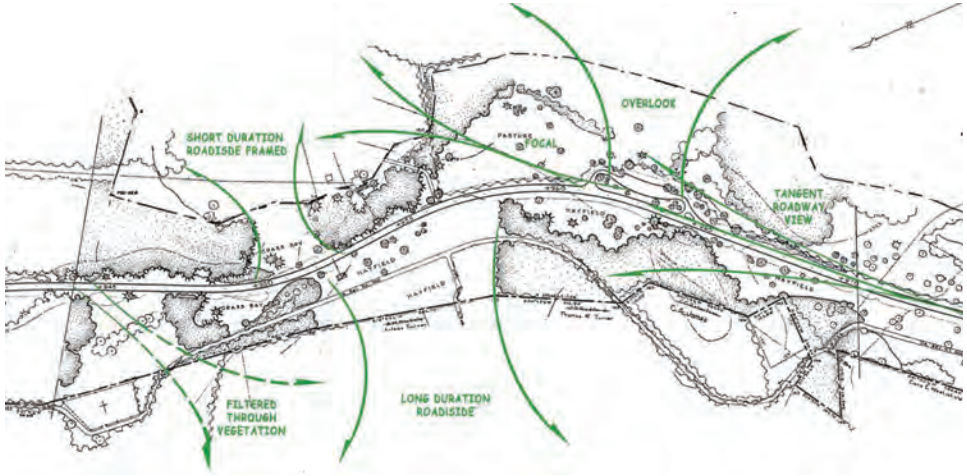
Views from the Parkway and views from your property are important to consider, whether you are enjoying the landscape as a resident or traveler. The landscape quality of the Parkway and your property depends on recognizing how the physical and topographic characteristics of the land compose the views. One way to identify what comprises the view is to map the landscape using a panoramic photograph to identify those special features that comprise the foreground and background (i.e., stands of trees, hills, open meadows, or water features). Some viewshed features may be very unique to the landscape (e.g., scenic rock outcropping or historic building) and need careful design consideration.



Components of a panoramic view. (J. David Anderson.)

It's All About the View

- Gary Johnson, 2008

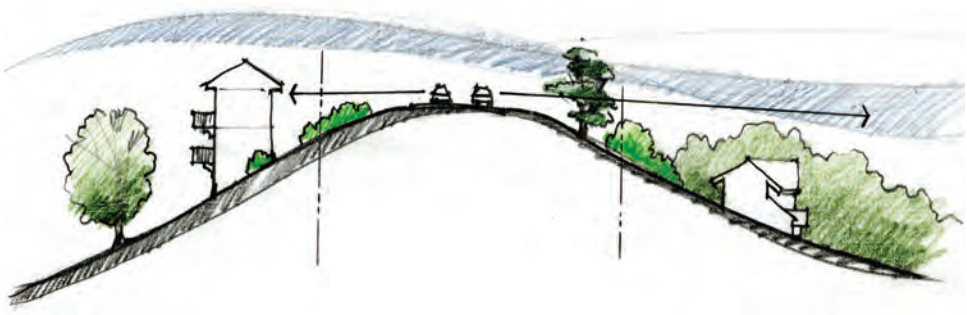


The Parkway staff characterizes types of views and their relative importance. Depending on the location of these features, they may be categorized as critical viewshed elements in the foreground that need special design consideration or, they may be distant elements in the background that are less influenced by development.

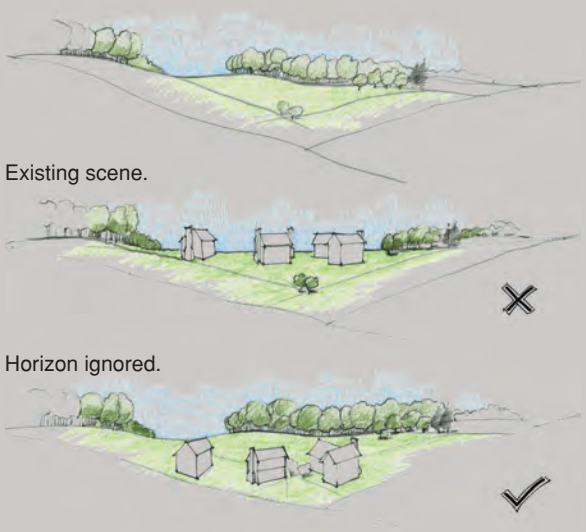
TYPES OF PARKWAY VIEWS

OVERLOOK	Panoramic: Framed:	Long Duration, Expanse determined by Vegetation Opening
ROADSIDE	Panoramic: Framed:	Determined by Speed and Length of Opening
FOCAL	Speed and Road Geometry Focus Eye on Feature	
FILTERED	Duration and Detail Depend on Vegetation Density	
ROADWAY	Duration is based on Road Geometry	

When Building on Your Property



When building on your property, consider the existing landscape and how the landscape and the elements will be affected by development. Certain features like ridgelines and hilltops add visual and ecological character to the natural landscape and effectively screen man-made elements. Carefully locate buildings to protect these features and maintain the existing grade of a property to minimize visual changes to the landscape. Chapters 2 and 3 teach you how to plan and design your property to work with existing Parkway features and how careful planning to protect and enhance these features benefit your development. Simple lessons like that shown above, by siting houses just a bit lower on the slopes, both new residents and Parkway visitors enjoy the view.



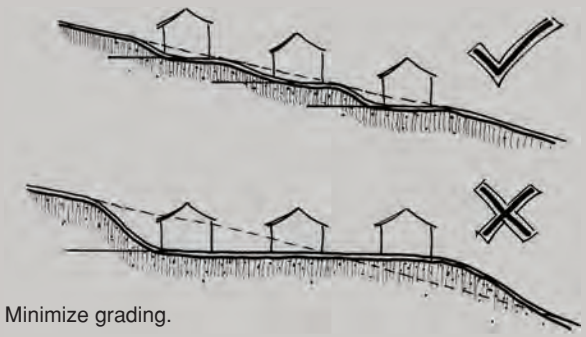
Existing scene.

Horizon ignored.

Horizon considered.

Above, lessons regarding siting using traditional Blue Ridge landscape patterns are discussed in Chapter 3, including advantages of the homes below the horizon line.

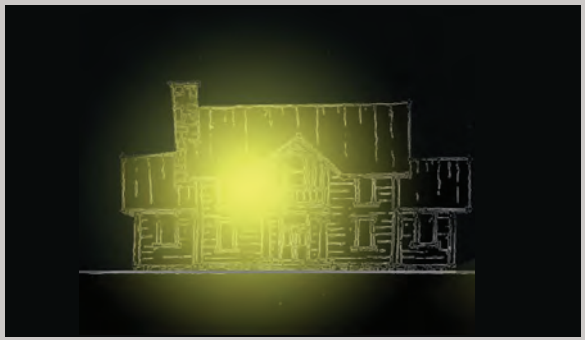
Below, lessons about minimizing grading are discussed in Chapter 4.



Minimize grading.

Roads, Utilities, Fencing & Lighting

The beauty of starlit nights from the Parkway and in your neighborhood can be greatly improved, just by using the right light fixtures. These are discussed in Chapter 4.



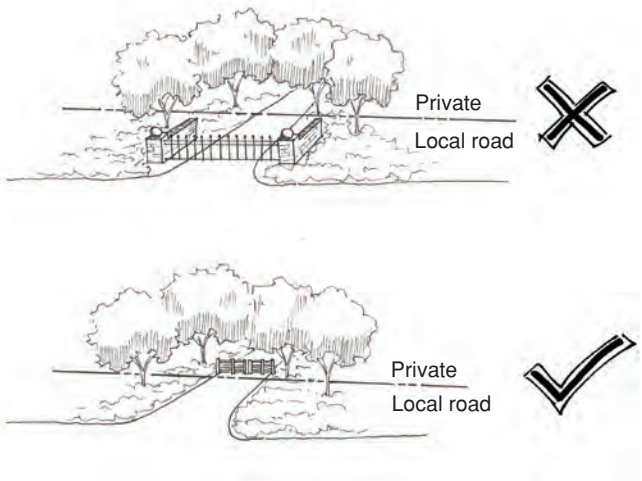
Standard undirected lighting.



Directed dark sky friendly lighting.



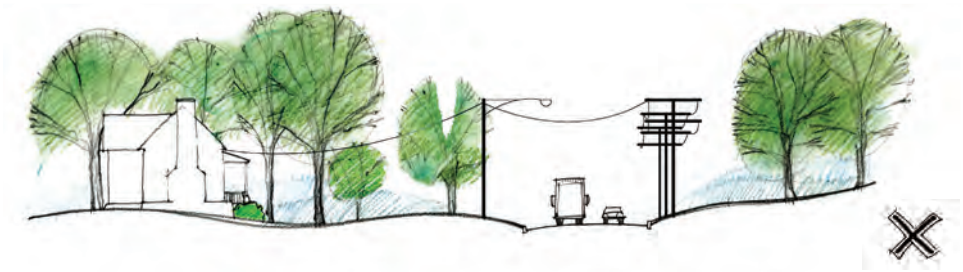
Directed dark sky friendly, low intensity lighting.



Today, our lifestyles are more complex than they were in the 1930s. We connect with our family and neighbors using various public utilities; we protect our privacy and provide security with lighting and privacy fencing; and yet, we yearn for that special place in nature where we can enjoy peace and tranquility. For residents along the Parkway, the challenges of property access, utility service, and property security are special ones that require advance planning and coordination in order to protect the Parkway's extraordinary character and natural landscape features. It is very important that the placement and design of utilities, fences and roads be carefully thought out by providers and residents. Ensure you know where your property boundaries are to avoid encroaching on Parkway land.

Carefully plan the utility corridors by using alleys and other common planned corridors, such as underground easements, in a light-imprint approach, to avoid large clearings laden with utilities.

Design fences to comply with Parkway Guidelines, to provide the boundless visual experience for the visitor.



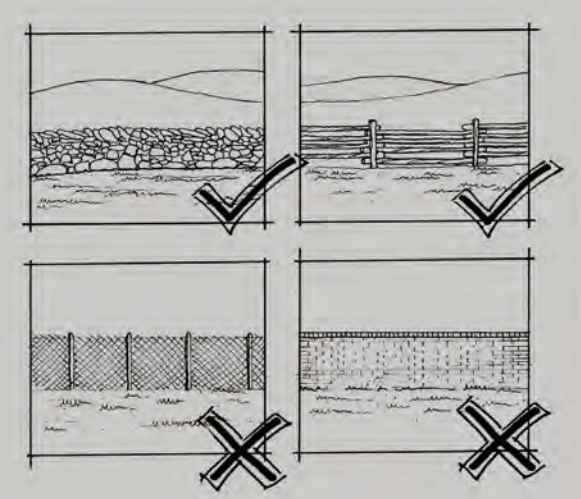
Standard utilities above ground.



Light imprint approach with underground utilities.

Many developers have been surprised when planning for off-site utilities that a permit is required to locate utilities on Parkway land. Utility access across the Parkway is not guaranteed. If a permit is obtainable, placement will need to comply with strict regulations.

Chapter 4 discusses fence styles and uses, to harmonize your property with the Parkway, and suitable planting concepts to blend your landscape with the Park.



Details, such as fences, should be in character with the Parkway.



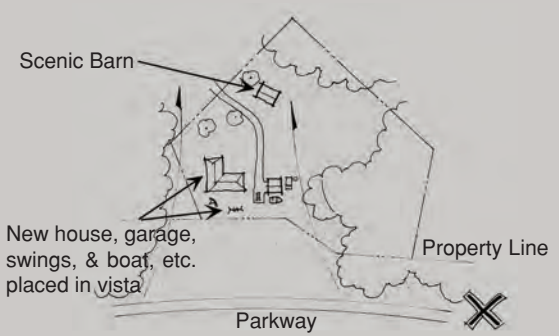
Garden trespasses on Parkway land.

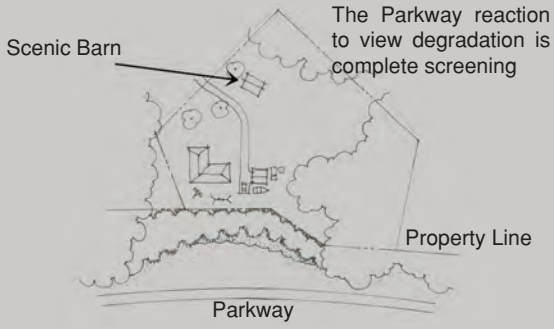


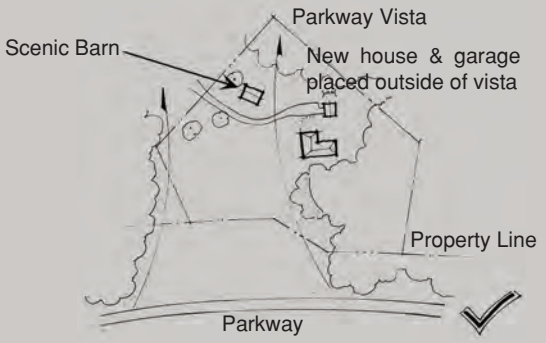
Garden located properly outside Parkway land.

Any development should be outside the Parkway boundary.

Planting





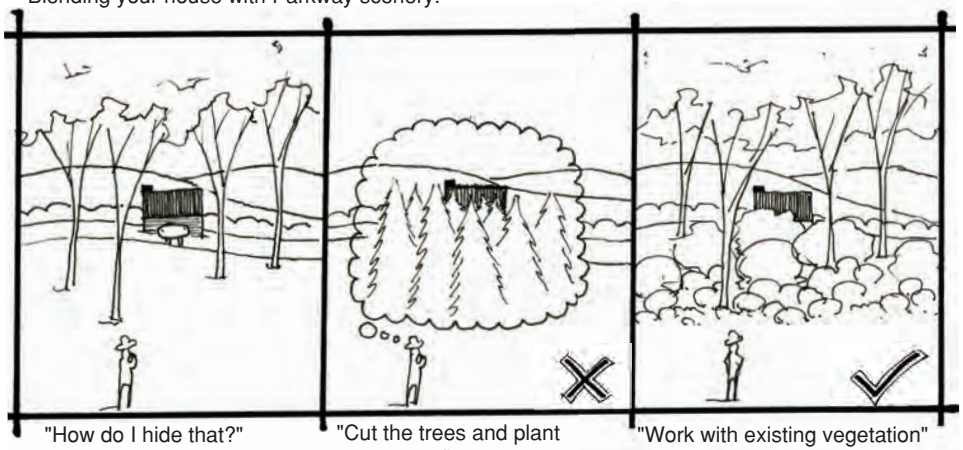


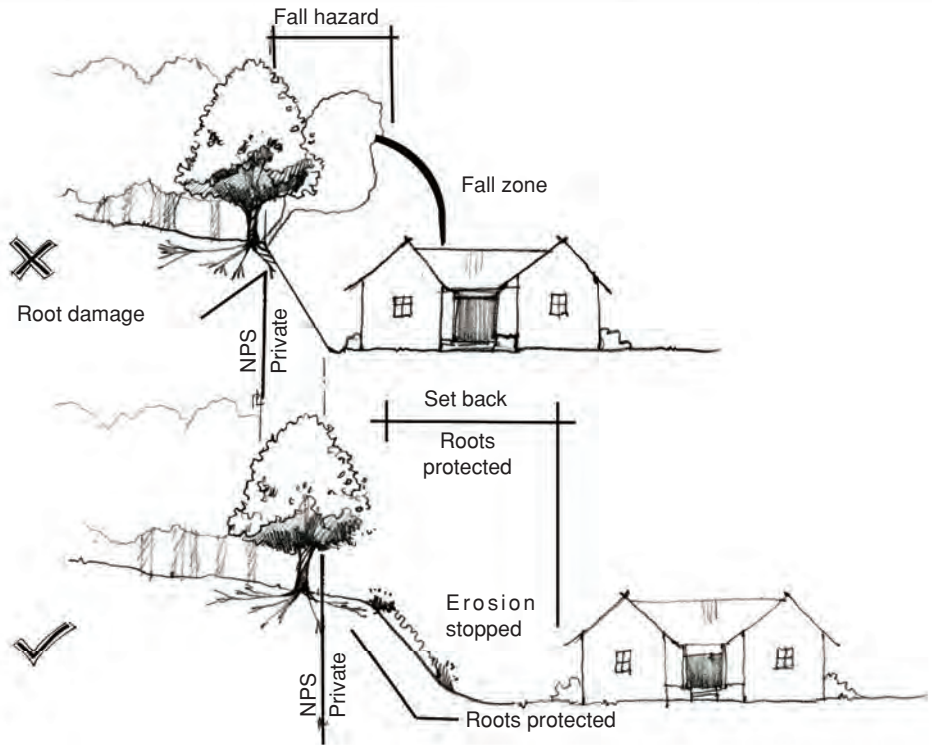
Understanding the Parkway's perspective, so you can skillfully site your house and farm compound, may be your most important contribution toward the Parkway. This is discussed in Chapters 3 and 4.

When building on your property, consider the existing landscape that has been composed. Chapter 3 discuses planning your facility. Plants can be used to mitigate poorly-sited structures. Chapter 4 discusses planting concepts and design.

Using the right plantings helps to maintain and sustain the natural landscape of the Parkway. Trees and shrubs can mitigate existing view problems, and blend the landscape of your yard into the scenery. It is especially important to develop a carefully thought-out landscape plan for any new building project. Using native plants and incorporating existing vegetation in a development plan will ensure that the new landscape is healthy and compatible with the surrounding landscapes.

Blending your house with Parkway scenery.







Existing site.



Best alternative: house sited out of vista.



Uninformed alternative: house sited within vista.



Plants added mitigate uninformed alternative.

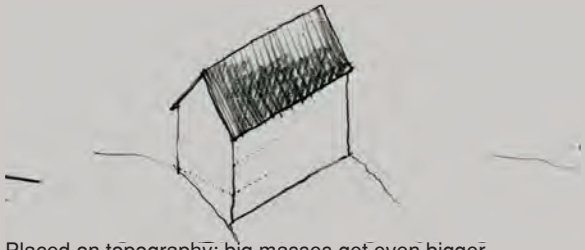
Architectural Massing



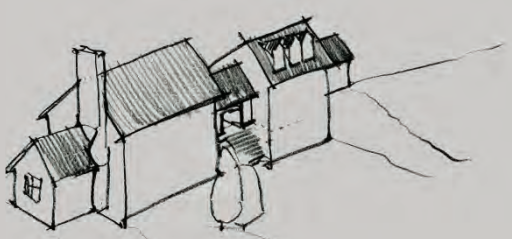
Elevation: large house in one large mass.



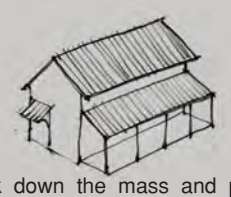
Elevation: large house composed of small masses.



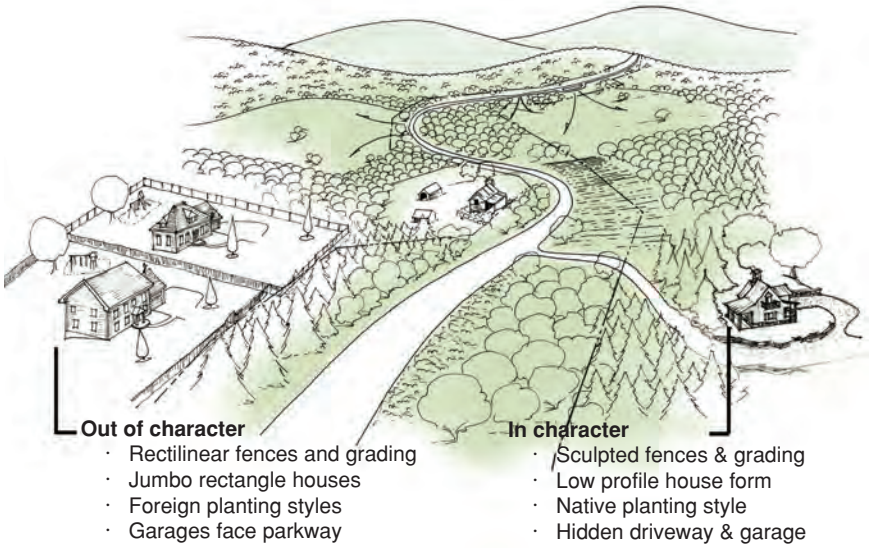
Placed on topography: big masses get even bigger.



Small masses fit onto the topography.



Porches break down the mass and provide interest at a relatively low cost.



Building new structures in character with the Parkway requires an understanding of the region's architecture, and the way buildings were traditionally placed in the landscape. Taking advantage of natural and scenic landscape elements and using architecturally compatible forms and materials are fundamental to achieving a development which complements the character of the Parkway. When considering new buildings and development adjacent to the Parkway, attention must be given to building position, scale, mass, form, symmetry, materials, and colors in order to maintain harmony with the historic and natural landscapes. Chapter 5 discusses these techniques.

Colors









Colors found along the Parkway are based on tradition and natural features such as exposed rock outcroppings, the famous Blue Ridge haze, and vegetation. Several color palettes have been developed to assist property owners with selecting complementary colors that will enhance the Parkway. In the example to the left, a new white warehouse is placed; then painted with a Guidelines color, then screened with plants. Chapter 5 discusses the design of buildings, their themes, shapes and color.



New warehouse.



Painted with complementary color.



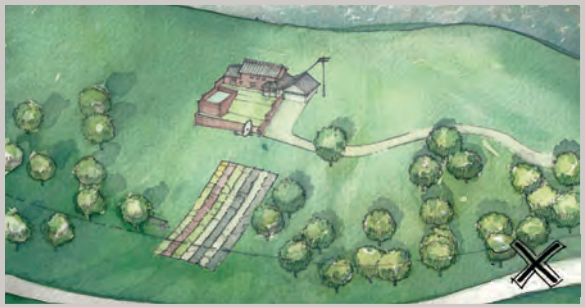
Screened with plants.

Considerate Design

The lessons of this Guide culminate in Chapter 6, Considerate Design. Here, the skills of careful planning, siting, design and land use combine with an example of considerate design.



Existing conditions.



Inconsiderate design.



Considerate design.



Sometimes one picture is worth a thousand words. To the left is an example of a design that is considerate of the historic views prized by the neighbors and travelers, and another that is inconsiderate of these guests.

The inconsiderate design centers the building in the vista, uses incompatible materials forms, such as red brick and neoclassical building and wall details. The design also leaves a big road cut on the way to the Parkway-facing garage, and is inconsiderate in its careless location of above ground utilities and satellite reception dish, swings, and garden.

The considerate design sites the building as far out of the vista as possible, allowing the residents to enjoy the vista. It uses forms and colors consistent with the guidelines, and locates recreational and gardening structures out of the view of the Parkway. Chapter 6 discusses considerate design as part of the Parkway Neighbor's responsibility.

Additional Chapters

These design guidelines are organized to provide you with an understanding and overview of the Parkway's design and specific details to help you adequately evaluate and plan for your building projects. The introduction has provided an overview of the visual issues confronting the Parkway. The next chapter introduces you to the most important step of dealing with your site conditions. Once you have completed that step, you can determine where and how new buildings should be placed in the landscape. Think of this important planning exercise as pages in a book – you have to understand the plot and the characters in order to fully appreciate and enjoy the ending.

Chapter 2

Site Inventory & Analysis

Introduction to Site Inventory & Analysis

This chapter helps you understand site conditions to ensure that your development will fit well on the land and how you can best utilize your property while also preserving the special qualities of the Blue Ridge Parkway.

By looking at site features and evaluating their ability to accommodate development, one can locate the most suitable land for development. A property is comprised of various site features, or components, that can be inventoried, compared, and analyzed to determine the best areas for specific land uses and development. The Blue Ridge Region of Virginia and North Carolina displays a variety of natural and man-made features that can be mapped using a layering technique to identify development opportunities or constraints for a property.



During site inventory walk the property to document important features through photography and sketches.

In this chapter, we demonstrate a method to isolate these features on maps and photographs, so they are useful in developing a plan for your property. Once these maps are created, we show how to combine them to serve as a basis for land planning.

This chapter also discusses important environmental considerations for developing your property. For example, disturbing or destroying important cultural or historic resources, or an endangered or threatened species can have a significant impact on your development, as well as monetary costs. Many features of a property are obvious, while others may not be visible to the untrained eye. It is important to identify these important environmental features early in the development review process.

Early planning is always a prudent investment!

A Five Step Process

This guide recommends a five-step process to identify development opportunities and protect sensitive natural and man-made resources as you plan and design your development. This chapter concentrates on the process for the first three steps. Steps four and five are discussed in greater detail in Chapter 3.

1) The first step is a ***Site Inventory*** the existing conditions of property. Approximately nine maps are developed that illustrate base conditions.

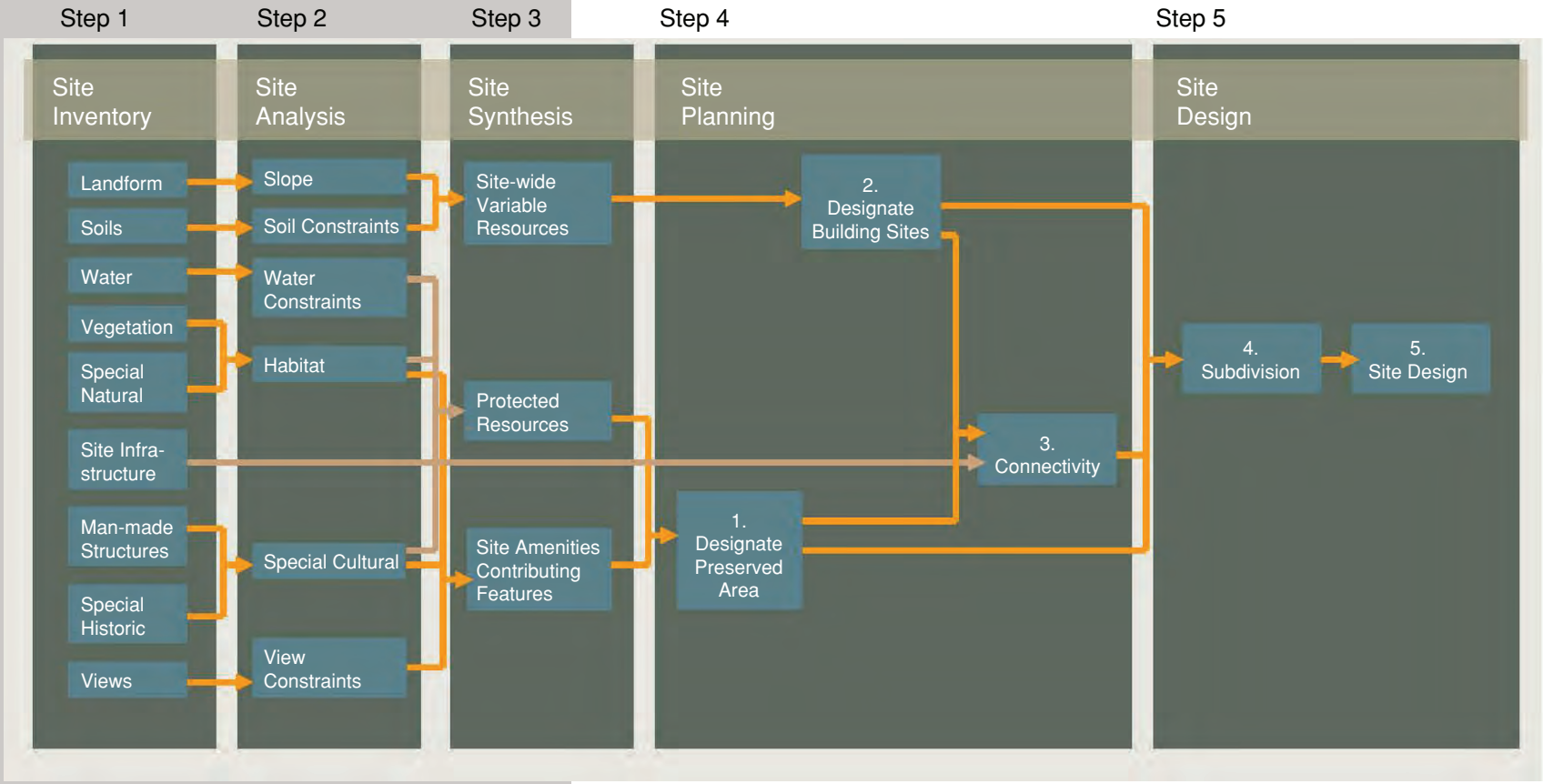
2) The second step is ***Site Analysis***. By overlaying and comparing the site conditions maps, created during the site inventory process, new maps or views are generated that identify development opportunities and constraints for the property.

3) The third step is ***Site Synthesis***. This step combines the site inventory and analysis maps into three groups of maps: protected resources, site amenities and contributing features, and variable resources.

4) The fourth step is ***Site Planning***. This step provides draft development concepts for the property taking into consideration the site information accumulated in the first three steps.

5) The final, fifth step is ***Site Design***. The selected development concept is refined and transformed into construction plans.

This recommended process is a general guide for property development, however, you can customize it to suit your individual needs.



The Five Step Process for Development Planning

Site Inventory

Before you begin the development planning process, walk the site and list the important natural and man-made features that add character to the property. The site inventory process helps to identify special features worthy of protecting and those areas best suited for development. In addition, it flags those areas that should be avoided such as floodways, wetlands, water bodies, cemeteries, and habitats for endangered species. It also locates landscape features, for future planning and design.

Examples of these features may include barns, hedgerows, trees and forests, meadows, farm fields, wildlife habitats, scenic vistas, and historic structures.

In addition to important site features, there are other important items near your property that need to be included in your overall plan. Infrastructure such as roads, utility lines, drainage ways, and right-of-ways or easements may affect your development plan. Once inventoried, the site analysis process helps to integrate these features into your development plan.

EXAMPLE: The Kelley School Site

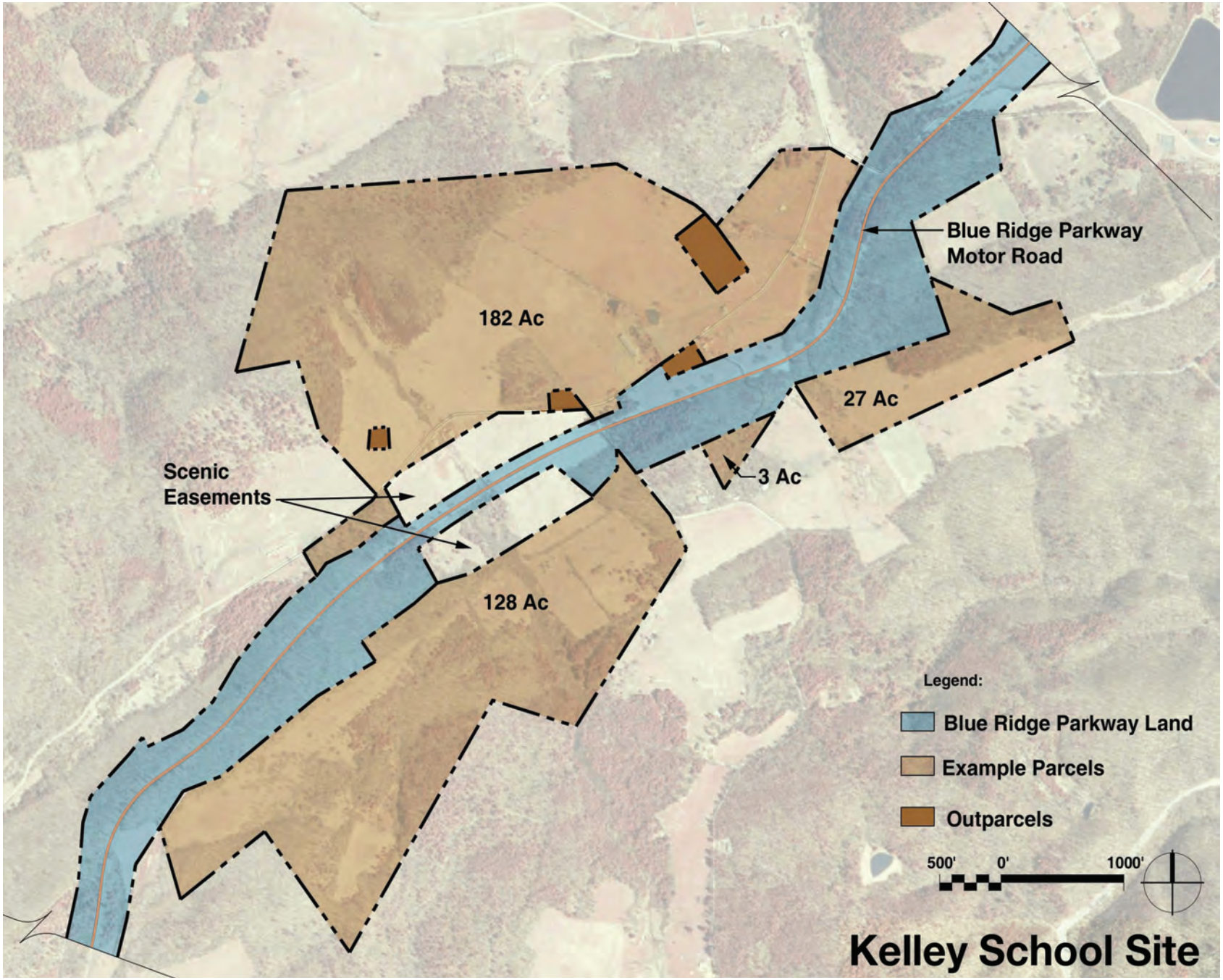
The next several pages examine the Kelley School Site as an example of how to apply the site inventory and analysis process. Described in the planning classic Design with Nature, by Ian McHarg, an inventory of the site produces a list of features and series of maps which can be overlain and compared, thereby allowing for analysis of the site. These maps can be further synthesized and grouped to gain a more in-depth picture of the property's development opportunities and constraints which are very useful for site planning and design.

Many public agencies offer valuable site information to property owners. There are immense databanks of information at the federal, state and local levels, with much of the data available through the internet. Local governments usually offer additional information through their planning or engineering offices or on their website. Many counties use Geographic Information Systems (GIS) to provide high quality online mapping for public facilities and properties. GIS uses a layer mapping format that allows the user to select the information layers to display.

Page 2.7 features a map of the example site used for the site inventory and analysis process on the following pages. The Kelly School site along the Parkway at milepost 148 features 340 acres on both sides of the Parkway. Abundant in natural and cultural features, and terrain variation, the property is a good case study for site inventory and analysis.



Map detail from National Park Service Blue Ridge Parkway Visitor's map.


Blue Ridge Parkway
Motor Road
182 Ac
27 Ac
3 Ac
Scenic
Easements
128 Ac
Legend:
Blue Ridge Parkway Land
Example Parcels
Outparcels
500'
0'
1000'
Kelley School Site

Resources for Information

Your local library reference desk or county planning office will be a very good place to start to collect reference materials about your site. Below is a list of web-based resources to get started on inventory mapping for your site:

Landforms and Topography:

http://topomaps.usgs.gov/ordering_maps.html

County Quadrangle Maps:
http://fisher.lib.virginia.edu/collections/gis/vagaz

GIS Sites:

http://www.webgis.net/gis_sites.html
http://www.hpo.dcr.state.nc.us/nrlist.htm
http://www.google.com

Soils:

http://websoilsurvey.nrcs.usda.gov/app

Wetlands and North Carolina Floodplains:

http://www.fws.gov/nwi
http://www.ncfloodmaps.com

Natural Resources:

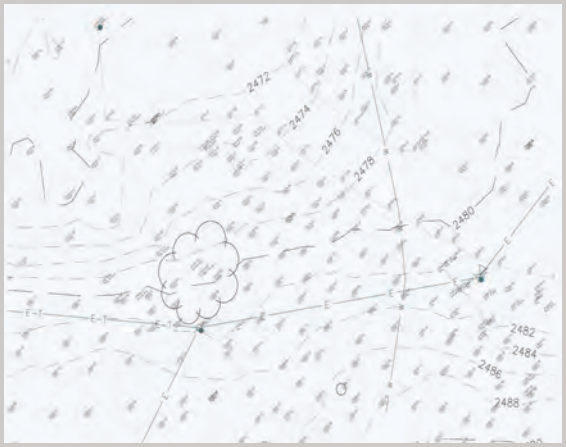
http://www.dcr.virginia.gov/natural_heritage/inventory.shtml
http://www.ncnhp.org/Pages/countysummaries1.htm

Historic Resources:

http://www.dhr.virginia.gov/registers/register.htm

To the right are examples of web-based data maps. They are valuable resources with which to begin your inventory process. They also can be a good source to identify important site features.

Types of maps: These maps show typical map styles and notations.



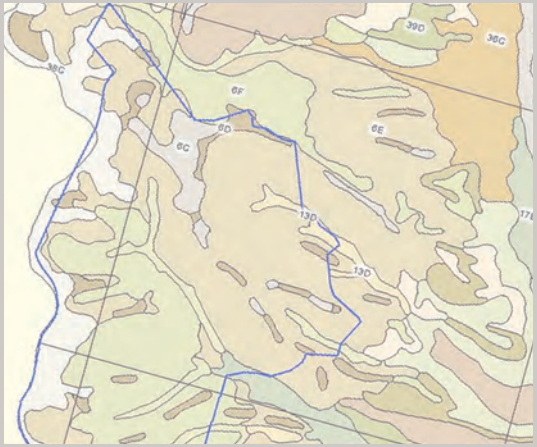
Typical site survey. This map is procured from a professional surveyor. It features property lines, easements, topographic data, and can spot special landscape features, such as trees or rocks, if requested.



USGS Quadrangle Map. Available at local blueprinters or outdoor outfitters, these show topography and land features at 1"= 2000' scale. They are updated every 30 or so years.



This map shows topography data available through a typical County Geographical Information (GIS) system. Systems vary widely by County. Some are quite rich in data.



Soils data available through GIS mapping systems. Colors indicate maps types and slopes of soils, coordinated with a legend.



Zoning/Land use data available through GIS, accomplished by layer manipulation on the County's GIS website. Colors indicate different classifications (housing, commercial, etc).



Aerial Photography is also avail from many county GIS systems. These tend to be more up-to-date than USGS quads regarding vegetation, buildings, roads.

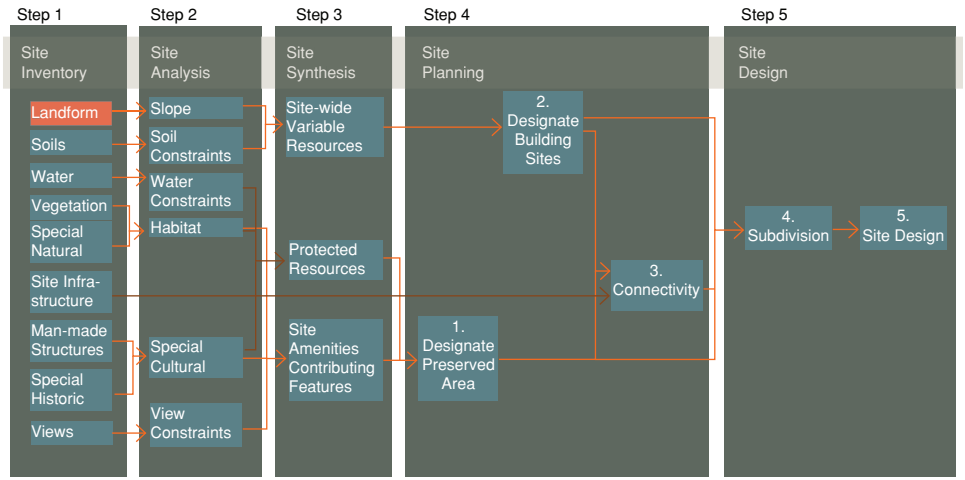


Stream and wetland data available through GIS. Some county systems allow layer manipulation to feature these.. Check also the Federal wetlands site.



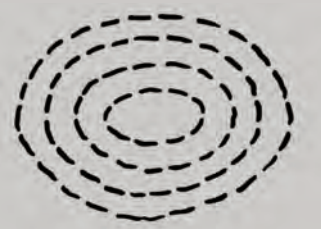
Roads and structures available through GIS, created by layer manipulation on the County's GIS website.

Landform

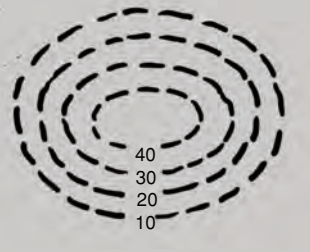


The landscape along the Blue Ridge Parkway displays a variety of landforms. Located at the summit of the Eastern Continental Divide, these lands have been in the making for millions of years. The landforms you see result from geological forces which have created a variety of distinctive shapes and forms in the landscape.

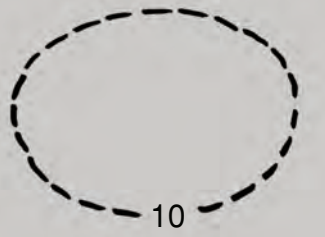
On maps, elevation changes in the landscape are illustrated with topographic lines. The lines represent elevations all at the same height above sea level. Imagine a layer cake. When held flat, all the icing at the top of one layer is at the same height above sea level, and the next layer is about 3" higher. A topographic map is a representation similar to a layer cake representing the landscape. Each landform has a topographic signature that serves as a reference point. Experienced map readers can recognize landform signatures and quickly discern a ridge, valley, or other form. Farmers and settlers of the Blue Ridge Mountains were quick to name the landforms around them based on their visual appearance. Imagine a "saddle," "hollow," "ridge," "gorge," "neck," "spit," "camelback," "humpback," "crag," "gap," or "bottom". These names are quite effective in describing a specific landform and in identifying these prominent features.



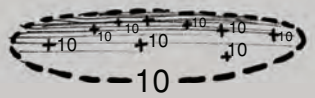
These two-dimensional dashed lines represent an actual three-dimensional landform. This is a topographic (topo) model.



A topo model needs elevations and scale to be useful. Elevation tells the height of each dashed line (contour).



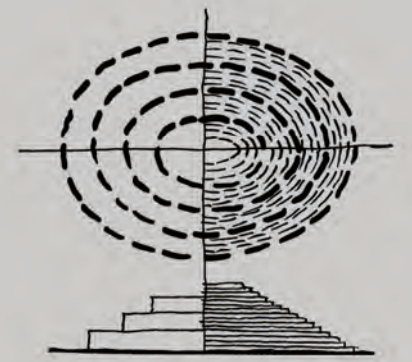
Let's take a look at one contour line by itself. Imagine that this is a flat plane. Every point on it is exactly the same elevation (usually relative to sea level).



If you were to look at the contour line from an angle, it would be completely flat. All points on it are at the same vertical height.



The vertical distance between contour lines is important in the process of reading topography. This is consistent across a map, and is known as the contour interval. In this example the contour interval is ten feet.



The smaller the contour interval, the less vertical distance there is between contour lines. The smaller this distance, the more accurate the model will be.



Even though a literal translation of contour lines results in a stepped layer cake model, its surface should be interpreted as having a smooth slope connecting each contour line.

Topographic Survey

What is it?
A topographic survey measures the elevations of natural and man-made features on a piece of land; it gathers the information needed to create a topographic map, which graphically depicts the characteristic landforms.

In reviewing topographic information for your property, two levels of study are needed. The first, basic level of study uses USGS quadrangle maps to show the land at 20-foot contour intervals. USGS maps show general landforms and give a good overview of the land features; they are very useful in early development planning. The next, more detailed level of study is a site specific topographic survey that provides detailed information needed for project design.

How is a topographic survey done?
A licensed surveyor uses equipment to locate elevations at several points on the property usually a relation to existing established elevation. The collected data includes horizontal and vertical locations of the topographic features. These points are plotted on paper and illustrated on a map using contour lines that connect points of equal elevations. The process is similar to a “connect-the-dots” puzzle.

What should be included in a survey?
A survey map typically includes topography, natural features, man-made features, boundary information, and recorded easements. In planning and designing a development project, topography is best expressed in 2-foot contours, with hilltops and low points highlighted. Natural features mapped may include such things as streams, wetlands, ponds, rock outcrops, tree lines, and specimen trees. Man-made features may include such things as buildings, roads, fences, cemeteries, utilities, and septic drain fields.

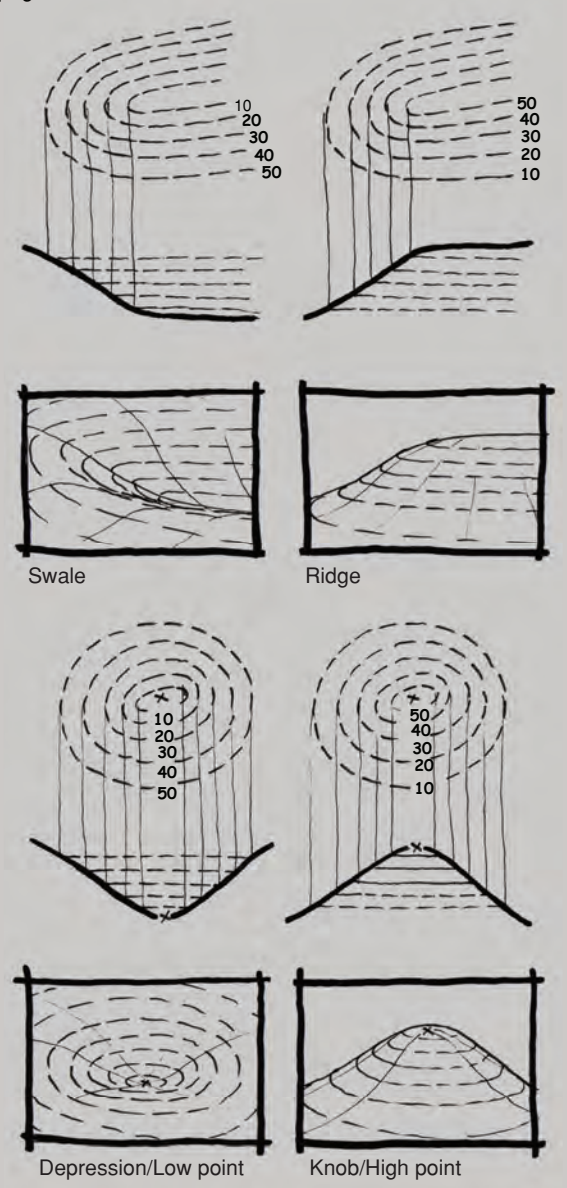
EXAMPLE: Topography of the Kelley School Property

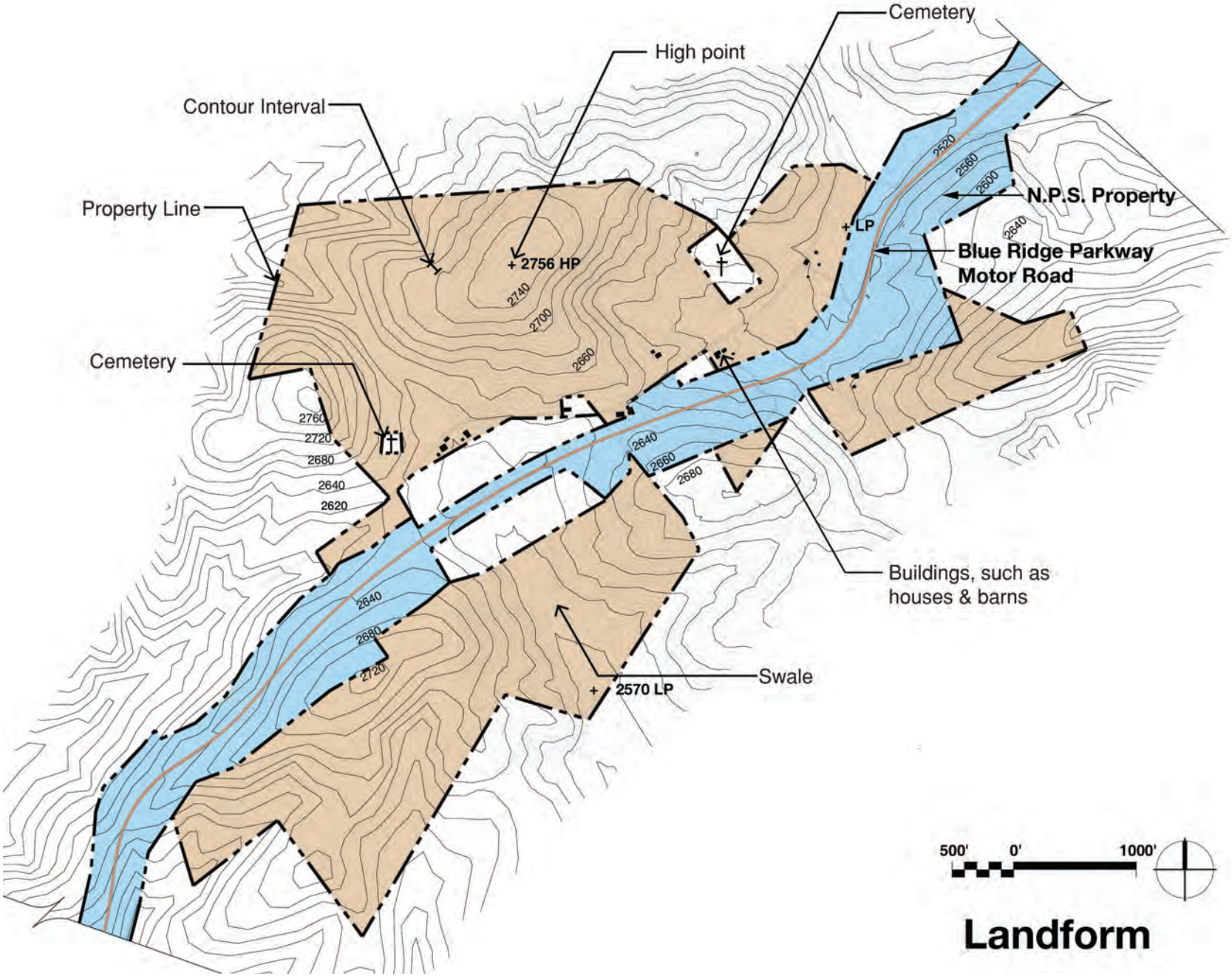
The map on the following page shows a topographic map of the Kelley School Property. Notice these elements on the map:

1. The bold ***topographic interval*** is 20 feet. Labels are on some of the contours, showing changes in elevation above sea level. Notice also faint 5' contour interval between the 20' contours.
2. The ***high point*** (HP) on the property is a knob at 2,756 feet above sea level.
3. The ***low point*** (LP) on the north side is adjacent to the property line, just above elevation 2,520. The low point on the south side is in a swale, midway between 2,580 and 2,560, at about elevation 2,570.
4. Notice the ***landforms***. A knob appears on the north side, with the high point. It is part of a saddle formation with the other knob on the western property line. Between these knobs, a swale starts, with one branch going north and the other going south, crossing through a cluster of houses and barns. Later, it falls and becomes a valley.
5. ***Property lines*** are shown in a dashed line arrangement around the edge of the property. This is the traditional way property lines are shown.
6. Notice a few square out-parcels within the property. Two of these are ***cemeteries***.
7. Barns, houses, and other structures appear as little black squares on the map.

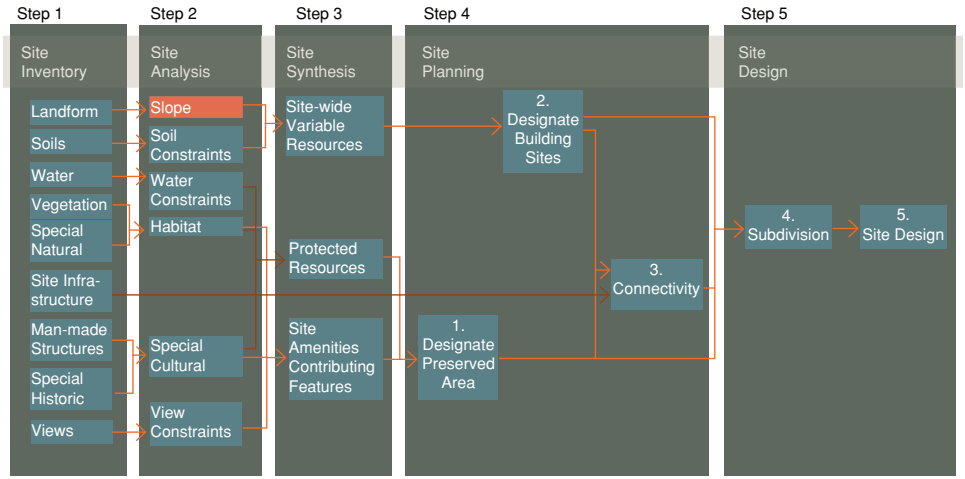
Next, we will learn to interpret slope using topographic information.

A swale, ridge, depression and knob are shown below. Can you find similar features on the Kelley School Property, on page 2.13?




Cemetery
High point
Contour Interval
Property Line
+ 2756 HP
2740
2700
2660
Cemetery
2760
2720
2680
2640
2620
2640
2680
2720
+ 2570 LP
Swale
+ LP
2520
2560
2600
2640
N.P.S. Property
Blue Ridge Parkway
Motor Road
2640
2660
2680
Buildings, such as
houses & barns
500' 0' 1000'
Landform

Slope



What is it?

The term slope refers to the steepness of the land. Generated from a topographic survey, slope is an important consideration for development. Soil will erode if land is too steep; water will pond and not drain well if the land is flat and there is no slope. Think about how comfortable certain properties are for driving, walking, or mowing; this is due to of the slope of the land.

In the Blue Ridge, slope maps can be categorized generally as:

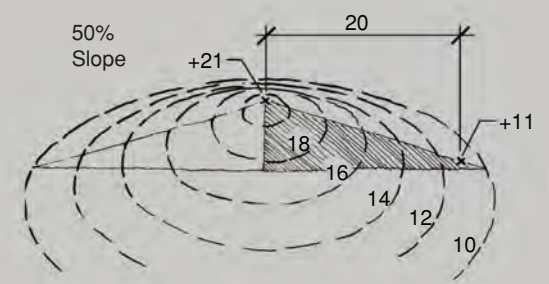
- Slopes of 1-5% are best for a conventional development, which may require handicapped access and parking, among other considerations.
- Slopes of 5-15% are generally is acceptable for road construction. The slope of an interstate highway, for example, is rarely more than 7%.
- Slopes of 15-25% will require grading for conventional development. Conventional houses are rarely built on land that slopes more than 15%.
- Slopes above 25% will be difficult for conventional development, but exhilarating for strenuous hiking trails.

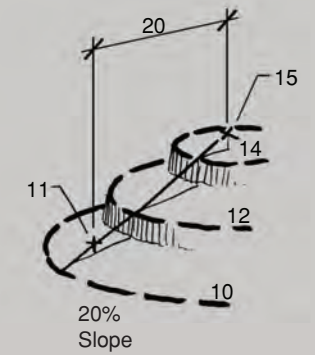
Slope Formula:

Slope = DE/L



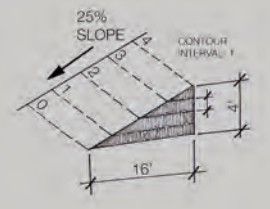
Calculate slope on a topography map by dividing the contour interval (difference in elevation) by the horizontal distance between 2 contours. This is sometimes called "rise over run."



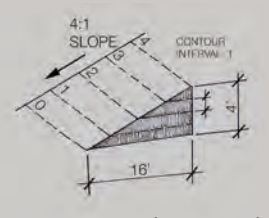


You can also calculate slope between two exact points on a map, using the same formula described above

Slope as a percentage



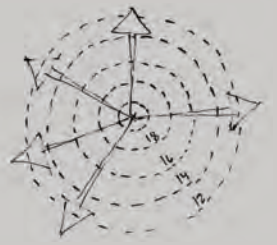
Slope as a ratio

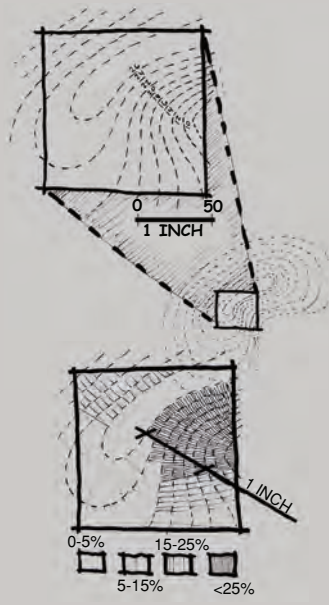


Slope can be referred to by percentage, ratio, or angle, although percentage and ratio are the most common.



Water will always run downhill, perpendicular to the contours





How to show average slope

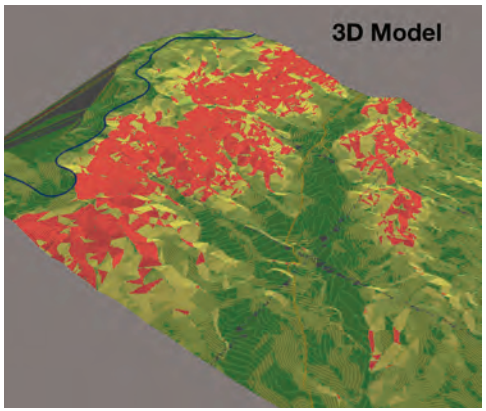
What scale is topography?
1 inch = 50 feet

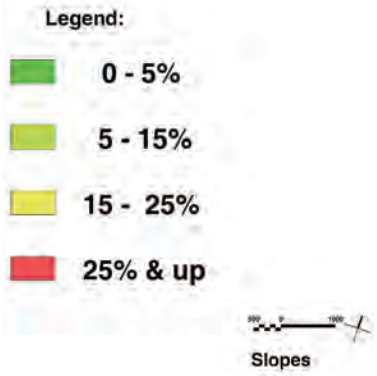
What slope ranges do you need to show?
0-5%, 5-15%, 15-25%, >25%

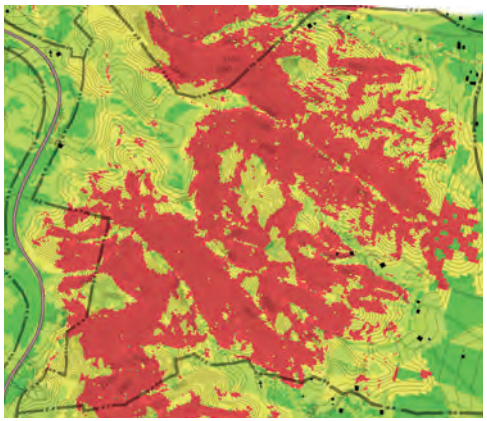
Use the slope formula to find the difference in elevation along 50 feet for each slope range.
- 0-5% = 0-2.5'
- 5-15% = 2.5-7'
- 15-25% = 7-12.5'

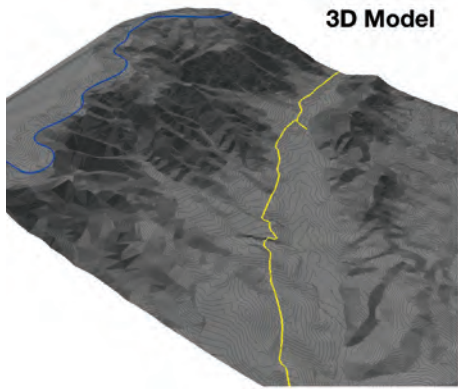
What is the topography model's contour interval? 2 foot

How many contours are within 50 feet (1inch) for each range?
- 0-5% = 1 contour
- 5-15% = 4 contours
- 15-25% = 6 contours









How is slope used?

Landscape architects and engineers discuss slopes in terms of percentage. For example, a 1% slope will rise (or fall) 1 foot over a 100 foot distance. A 5% slope will rise 5 feet over a hundred feet. A minimum slope of 1% is needed to drain pavement, and 2% to drain turf. Using slope to interpret topography is a good means of identifying the best lands to develop or preserve.

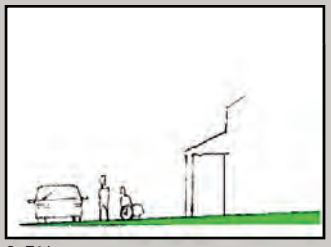
EXAMPLE: Slopes of the Kelley School Property

The map on page 2.17 shows a slope map of the Kelley School Property. This map shows lands with the low to moderate slope in green, those with moderate to steep slope in yellow, and the lands with the greatest slope in red.

Look at the sections to the right and the map on the next page. Note these characteristics:

1. The ***0-5% slopes*** are shown in the darker green. These flat areas are located on several of the knobs, and in the lowland areas near the streams.
2. The ***5-15% slopes*** are shown in lighter green. These areas tend to surround the flattest areas.
3. The ***15-25% slopes*** are shown in yellow. These areas are in the middle of the hills.
4. The ***25% and steeper slopes,*** depicted in red, tend to be on the north and west sides of the knobs, and on the edges of several streams. Notice how they run parallel to the contours.

Compare the steep slope areas of this map to the habitat map on page 2.33. Traditionally, farmers do not till or graze these steep slopes, so they remain wooded.



0-5%
Handicap accessible parking areas & general development.



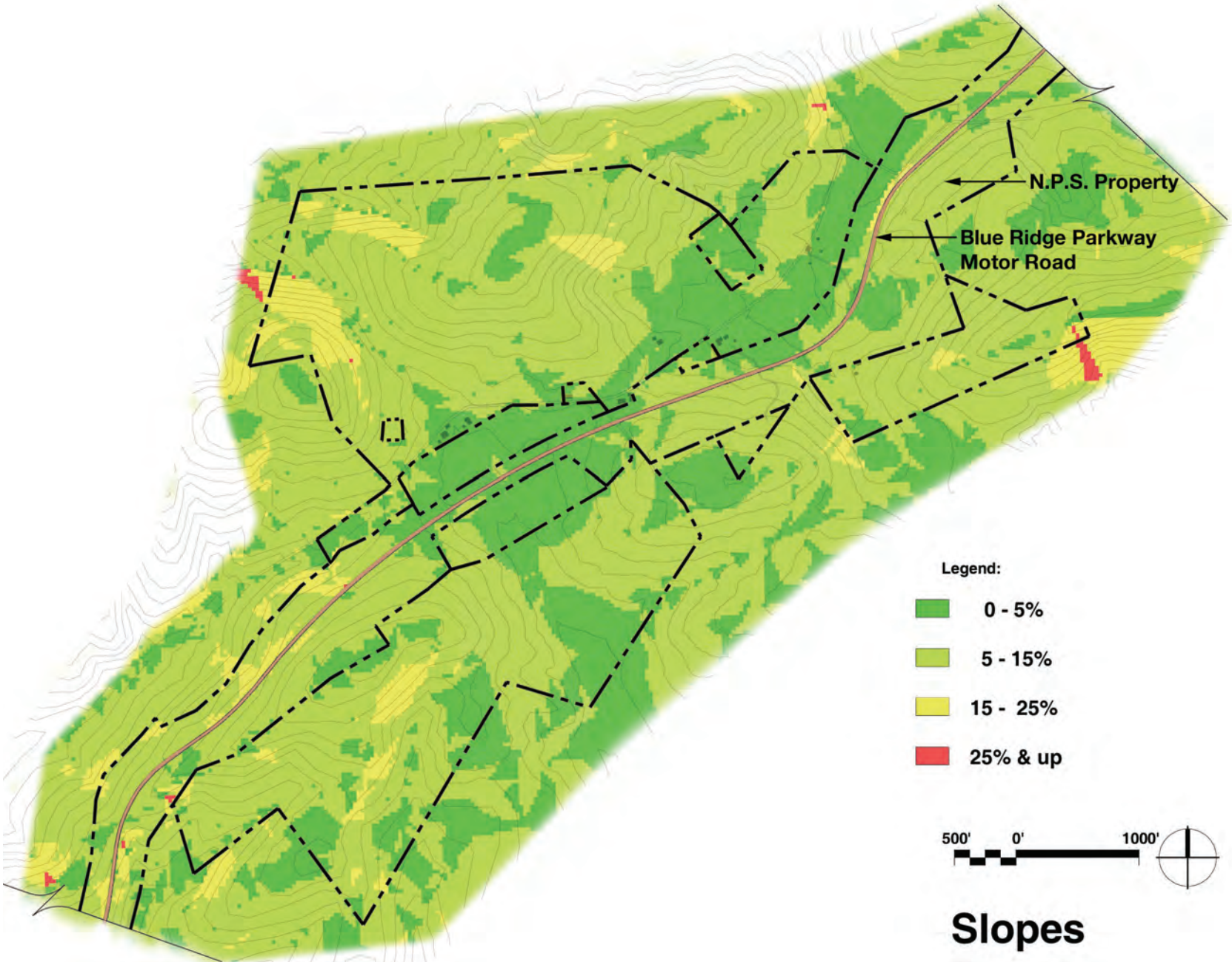
5-15%
General development.



15-25%
Steep driveways are difficult to develop.

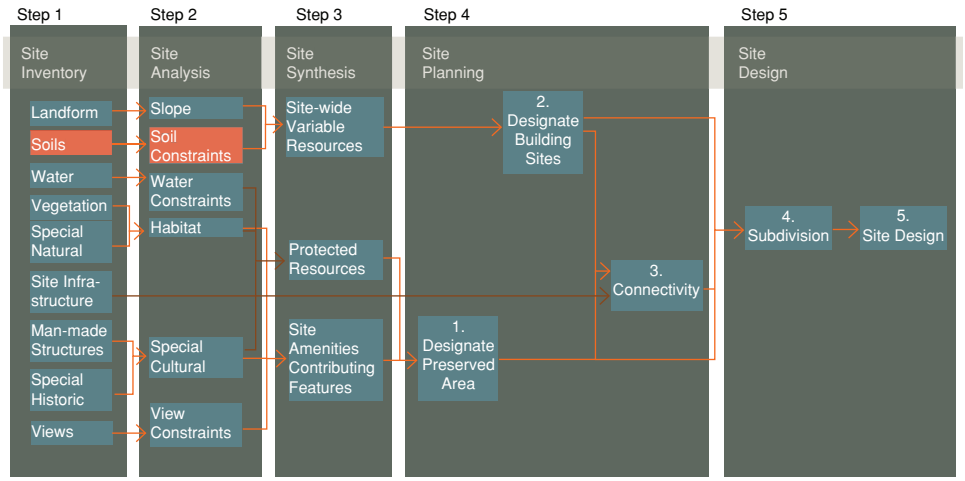


>25% Strenuous foot trails.


N.P.S. Property
Blue Ridge Parkway
Motor Road
Legend:
0 - 5%
5 - 15%
15 - 25%
25% & up
500'
0'
1000'

Slopes

Soils

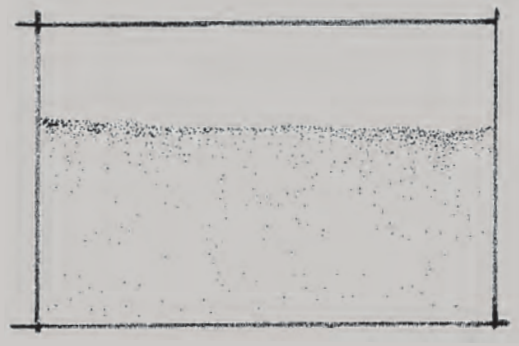


Soil Survey

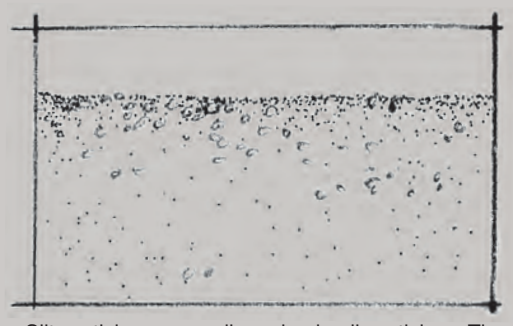
What is it?

A soil survey identifies soil types found on a particular tract of land. The information typically appears as a soils map accompanied with a brief description of soil types and characteristics. They are usually done for each county and provide basic information for developers and scientists.

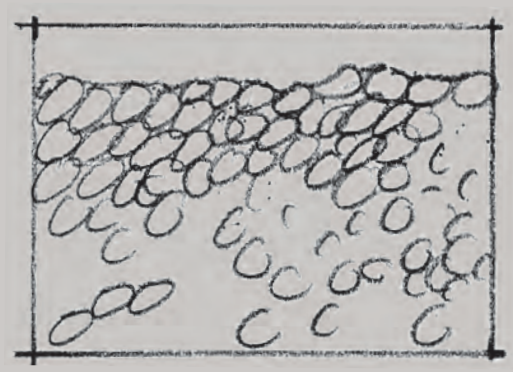
Soils are mapped for a variety of reasons. Knowing soil types, location and defining characteristics are important to road construction, home building, and development in general. Questions that may be considered include: What is the likelihood that soil will erode? What is the typical slope of the land where this soil is found? How deep is the soil over the bedrock? How much clay is present? An architect or a builder might use this data to determine whether a tract of land is suitable for construction. A farmer might use this information to determine if land is good for cultivating crops. A soil scientist might use this information to determine where to locate a septic system.



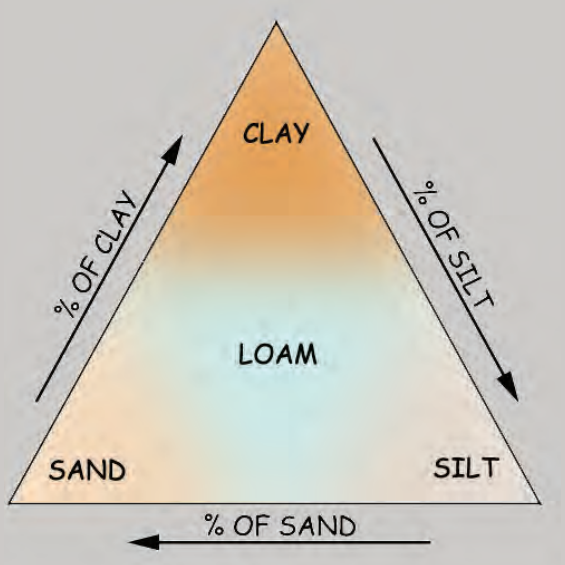
Clay particles are the smallest soil particles. They fits tightly together, which leaves less space for air and water to move through the soil.



Silt particles are medium-sized soil particles. They allow freer movement of air and water through soil.



Sand is the largest of the soil particles. Water moves easily through sand due to the large spaces between particles.



The Soils Triangle

Soil scientists have created a diagram called the "Soils Triangle." There are three basic soil particle types which compose soil: clay, sand, and silt. Each of the basic types has a different grain size, and has its own characteristics. The center of the triangle is loam, which is a mixture of these three basic types. Loamy soils have some of the characteristics of each type. For example, a sandy loam will generally percolate well, and allow for septic systems. A soil heavy in clays will not percolate well, but may make a great dam for a lake. Loams with some clay in them compact well for roads. Your soil survey will define these qualities, and more, to assist your land planning process.

How to identify it?

Many of the counties along the Parkway have been mapped by the USDA Natural Resources Conservation Service. Usually, a copy of the county survey is available in a local library. County soil surveys also are available online at http://websoilsurvey.nrcs.usda.gov/app/.

EXAMPLE: Soils of the Kelley School Property

The map to the right shows a soils map of the Kelley School Property. The predominant soil types are:

1. 6A – Hatboro Sandy Loam, 0 to 3% slopes. Frequently flooded.
2. 40C – Tate Loam. 7 to 15% slopes. Well drained with moderate permeability.
3. 118C – Edneytown Loam, 7 to 15% slopes. Well drained with moderate permeability.
4. 118D – Edneytown Loam, 15 to 23% slopes.
5. 118E - Edneytown Loam, 25 to 50% slopes.

In addition to providing an inventory of the soils, the Soil Survey provides constraints for development. These are based on their criteria. In the Kelley School example, there is a very-poorly drained area that receives a severe constraint. Other constraints mapped are either slight or moderate. The red zone on the map on page 2.21 shows soils and their relative constraints for conventional development.



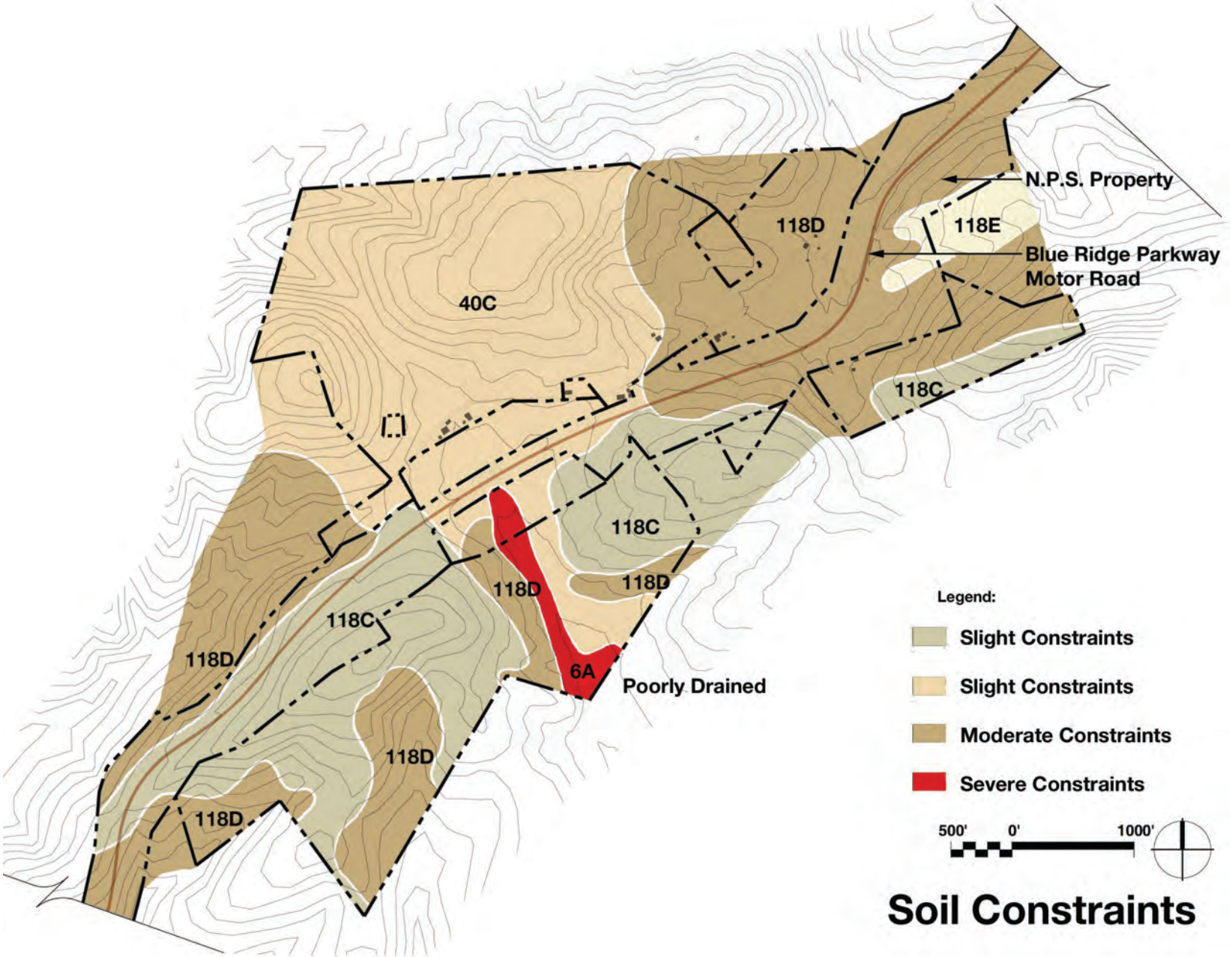
Low swale in area of Hatboro Sandy Loam.



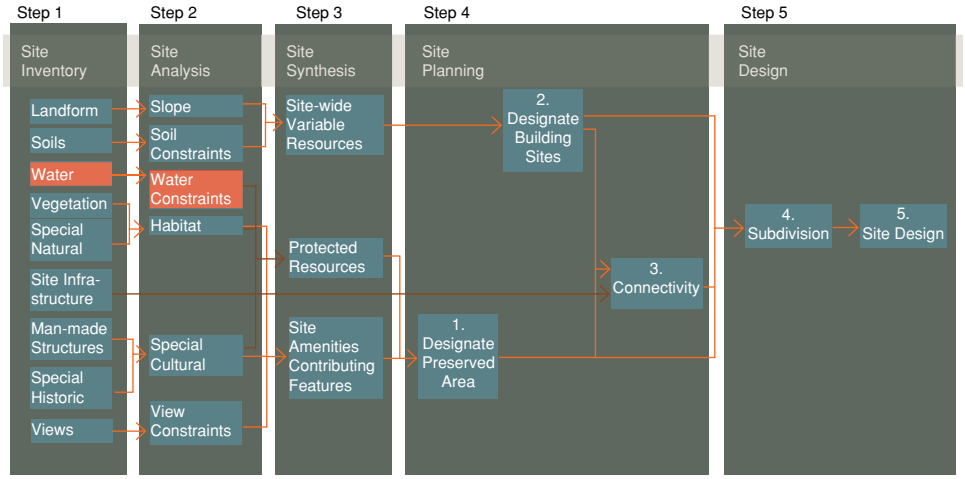
Pastures in areas of Tate Loam.



Woodlots in Edneytown Loam.


N.P.S. Property
Blue Ridge Parkway
Motor Road
40C
118D
118E
118C
118C
118D
118D
118C
118D
6A
Poorly Drained
118D
118D
Legend:
Slight Constraints
Slight Constraints
Moderate Constraints
Severe Constraints
500'
0'
1000'
Soil Constraints

Water



What is it?

Water resources, also referred to as hydrological resources, include all water bodies that may be found on a property. These may include rivers, springs, wetlands, lakes, and ponds. Water resources should be mapped and considered in development planning. Floodplains that may be inundated by water from an overflowing river, creek, or lake may not be a good site for development. In addition, the existing drainage pattern on a property will determine the most appropriate storm water management and drainage strategy for new development. A good rule of thumb is to maintain the existing drainage network as much as possible for reasons of economy, as well as for site preservation.

The Value of Wetlands

This is abbreviated from the Wetlands Initiative website:

- Wetlands improve water quality by removing pollutants and sediments in the water.
- Wetlands store floodwaters like natural sponges.
- Wetlands offer habitat for wildlife that cannot be found other places.
- Wetlands support biodiversity.
- Wetlands provide valuable open space for recreation.
- Wetlands contribute to the scenery.

For more detail on this list, check out the Wetlands Initiative website: http://www.wetlands-initiative.org

How to identify it?

Using the USGS maps or a topographical survey, highlight the areas where water is present. Supplement this information using Federal Emergency Management Agency (FEMA) floodplain information and the National Wetlands Inventory to identify areas prone to flooding and inundation, listed on page 2.8.

FEMA's Flood Insurance Rate Maps identify areas that are in a protected floodway or within the established 100-year and 500-year floodplains. The 100-year floodplain (also referred to as the Base Flood Elevation) is the standard term used to designate an area that has a 1% chance of equalling or exceeding an established flood elevation in any given year; the 500-year floodplain has a 0.2% chance of equalling or exceeding the flood elevation in any year. FEMA floodplain information is available in your local government's planning or engineering office. Also, maps are available online at their website: www.fema.gov/hazard/map/flood.shtm.

The U.S. Fish and Wildlife Service (USFWS) sponsors a website known as the Wetlands Online Mapper, which provides information about wetlands that may be on your property. Wetland maps provide reconnaissance level information on the location, type, and size of wetlands habitats. The website can be found at www.fws.gov/nwi.

Both FEMA and USFWS provide data at a very coarse or large-scale level of information. Data is available for what has been surveyed. Your property may have both floodplain and wetland issues that are not included in these federal inventories. Therefore, it is important to use a professional topographic survey to supplement information gaps. Also, there is no substitute for putting on the boots and going to see how it looks after a good rain.

EXAMPLE: Water Resources of the Kelley School Property

The map to the right shows a water resources map of the Kelley School Property. This property contains many hydrological features found along the Blue Ridge Parkway.

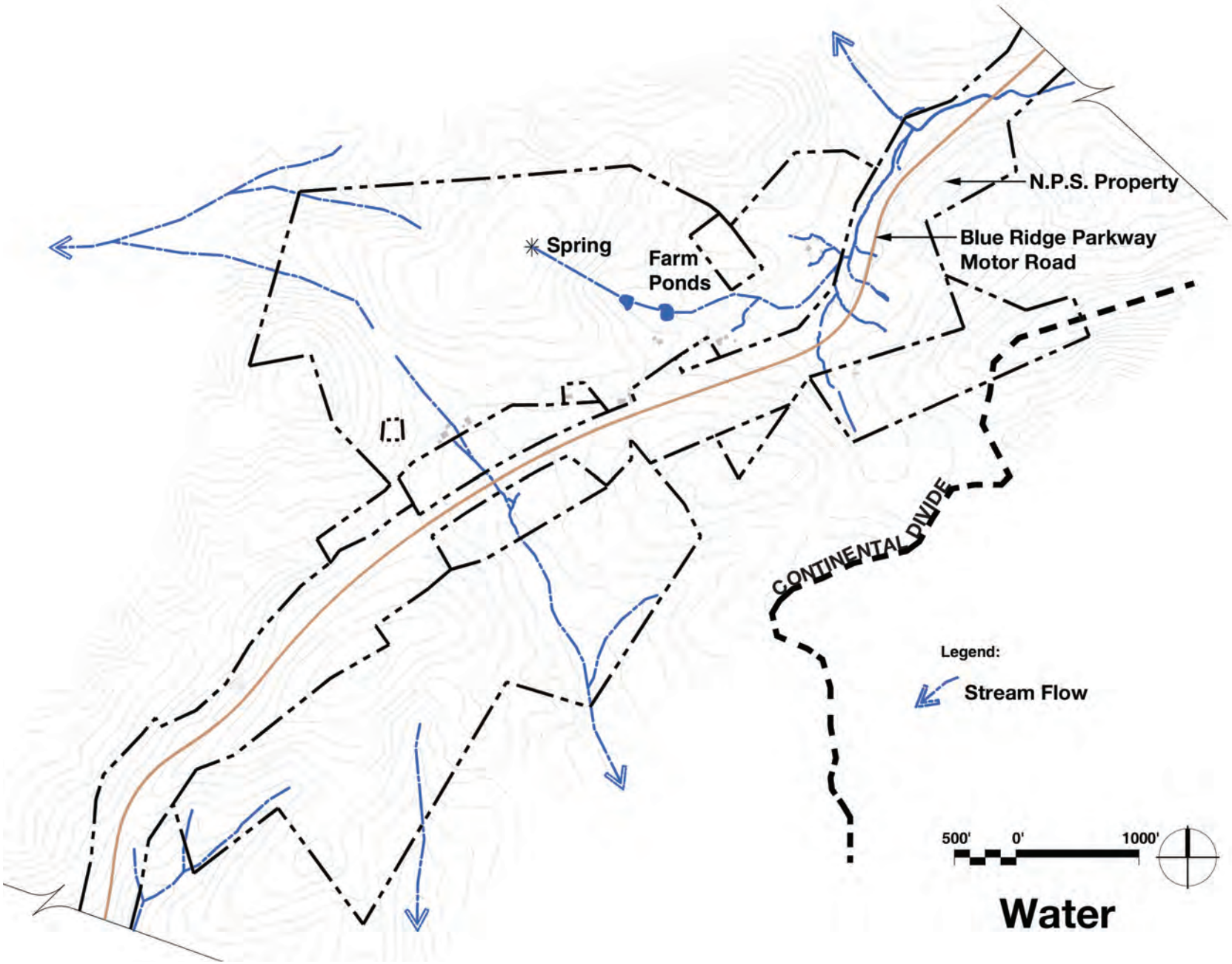
1. This land is located on the Eastern Continental Divide. Note that in the southeast corner, a drainage divide separates waters flowing to the Atlantic and to the Gulf of Mexico.
2. Notice on the north side that there is a **spring** in the saddle between the two high knobs. This is where underground water flows to the surface.
3. The spring feeds a stream that is the water source for two **farm ponds**. Below the farm ponds, several other small water channels join the stream, creating a drainage pattern that looks like the branches of a tree.
4. On the southwest, there are **perennial streams** and **intermittent streams**. Perennial streams flow year-round. Intermittent streams flow in periods of high rain.
5. A **wetland** is located on scenic easement lands just south of the Parkway.



Pond.



Wetland.


Spring
Farm Ponds
N.P.S. Property
Blue Ridge Parkway Motor Road
CONTINENTAL DIVIDE
Legend:
Stream Flow
500'
0'
1000'
Water

Water Constraints

What are they?

Know the water and your land. Careless development regarding water is the leading cause of water pollution, through sediment. Violation of state water pollution and sediment control laws can be crimes. Some areas around streams are restricted from development by law. This is true for established floodways or 100-year floodplains, as determined by FEMA. In order to develop in or modify the land in these areas, you must obtain a permit from the U. S. Army Corps of Engineers. Studies need to be done in advance to verify that the proposed development will not increase flooding. In addition, natural buffers around streams, ponds, and wetland areas are recommended to protect water quality, enhance habitat, and prevent damage from flooding. If the stream is perennial, a 100-foot buffer is a good rule of thumb; if the stream is intermittent, a 50-foot buffer is acceptable. Mapping water constraints and planning your development so that it avoids these areas is always the best choice.

In both Virginia and North Carolina, counties require a development plan approval prior to any construction activity. Your subdivision and site plans must meet erosion and sediment control ordinances, as well as other applicable local ordinances, such as those regarding floodplains. Work with your county planning, building, or engineering office to determine needed plan approvals, including any permits for streams or wetlands.

How to identify them?

Use USGS Quadrangle maps or a topographic survey to identify water resources on your property. Apply appropriate buffers to the water bodies -- 100 feet from perennial streams and wetlands, and 50 feet from intermittent streams.



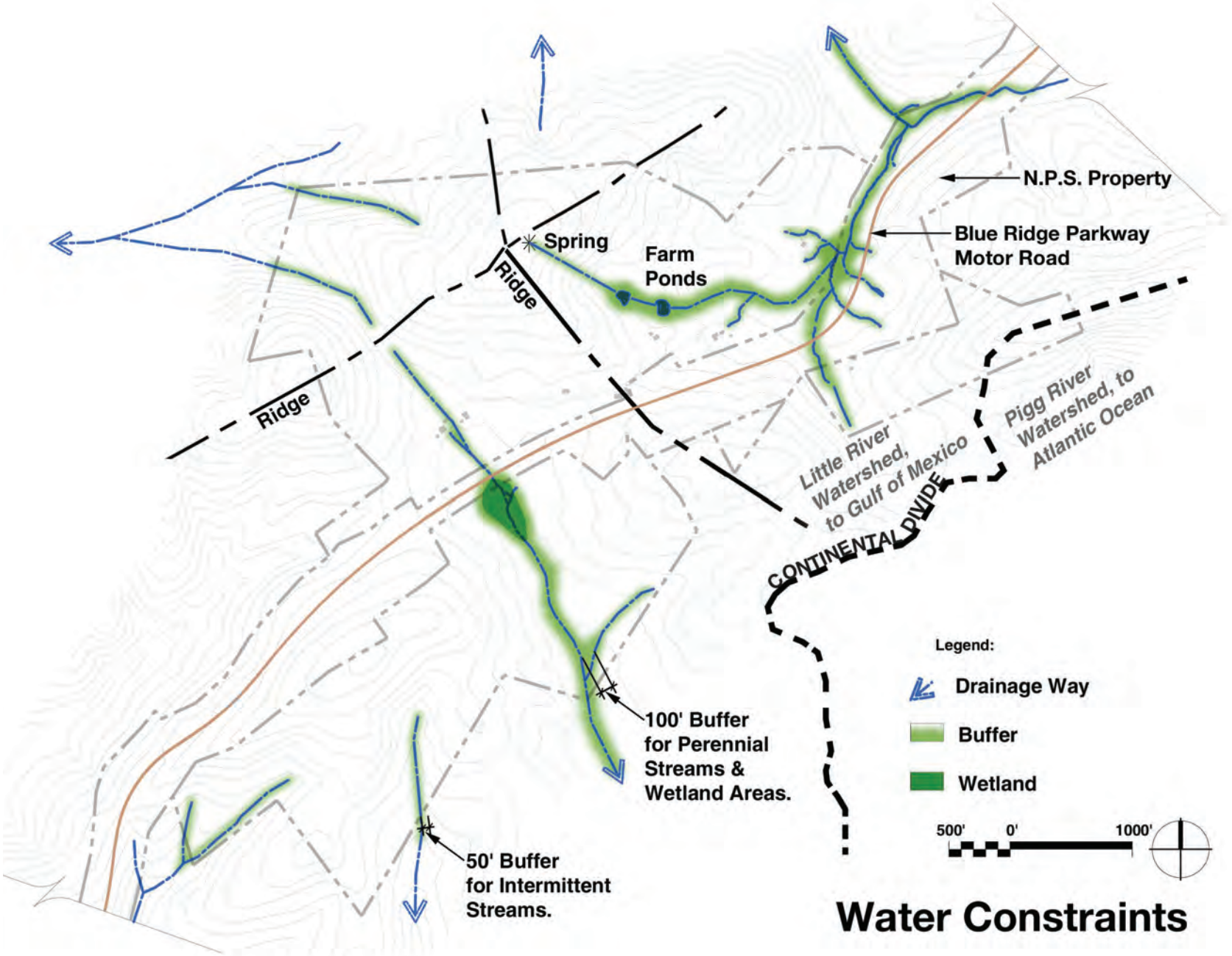
Farm pond.



Perennial stream.

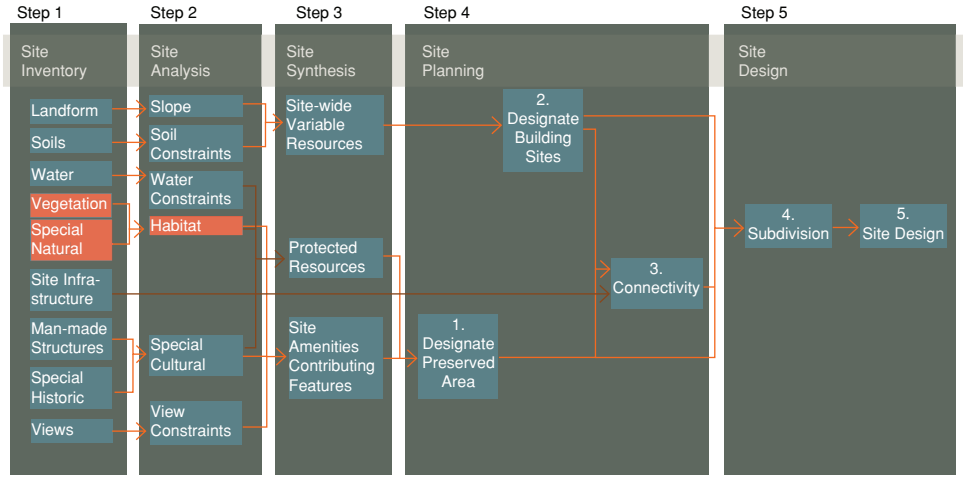


Intermittent stream.



Water Constraints

Vegetation



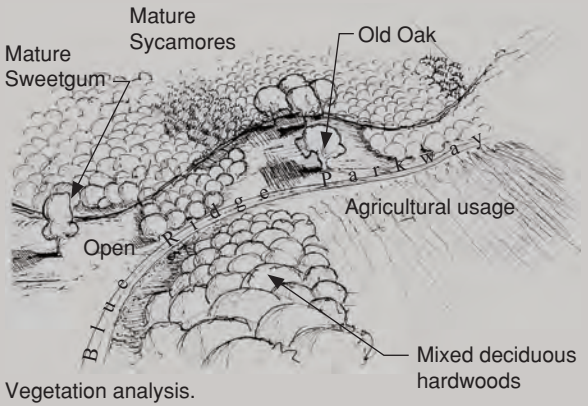
What is it?

Existing natural features such as woodlands, fence rows, orchards, wildflower meadows, and other vegetated areas are valuable amenities that should be documented and planned for in your development. Vegetation provides scenery, wildlife habitat, and environmentally-enhancing qualities such as shade and reduced erosion, as well as potential economic value (e.g., timber, crops). Existing forest can be more valuable retained as an amenity within property, rather than being timbered before a plan is delineated. First, delineate a plan, then consider areas to timber, in order to fulfill the plan.

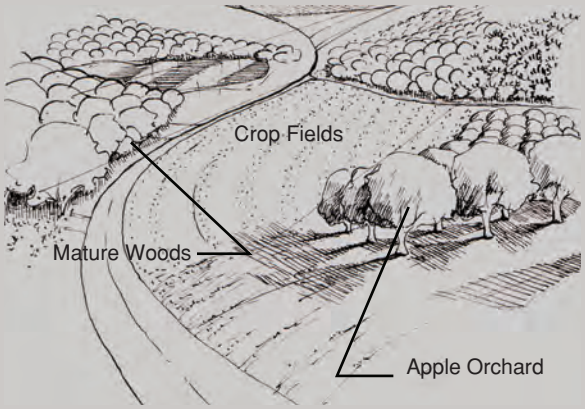
The Blue Ridge Parkway is host to more species diversity than any other National Park. More than one of these natural habitats and systems may exist on a property, depending on slope, soils, presence or absence of water, and other factors. Mountaintop or lowland sites may even offer rare natural environments that are worthy of special protection.



Old field (successional growth).



Vegetation analysis.



Make notes on an photo, or sketch locations of important vegetation.



Photo with annotations locating important vegetation.

How to identify them?

High-resolution GIS information for vegetation is available in most counties. Another good source for vegetation mapping is the Google Earth website, http://earth.google.com/. This is a good start, with different plant types visible on the aerial photo. With this in hand, there is no substitute for good site field investigation. As you proceed with your vegetation inventory, be sure to record the location and condition of evergreen and deciduous forests, as well as any wildlife. Make sure to document three layers of vegetation: forest canopy, shrubs, and ground cover. This vegetation information will be used again in the Chapter 4: Landscape Guidelines.

EXAMPLE: Vegetation of the Kelley School Property

The map to the right is a vegetation map for the Kelley School Property. This property exhibits many features typically found on older farms in the Blue Ridge Mountains. Many of these features may be similar to those found on your site, such as:

An ***old field*** (1) exists on the south side of the Parkway. This is probably an area where the farmer stopped managing the pasture and a number of small trees grew in a thicket.

A ***mature hemlock grove*** (2) is located in the central north property. In the last century, hemlock has become the predominate species in forests of the region. Now they are under severe attack from the wooly adelgid (see www.saveourhemlocks.org). A future decision will need to be made to treat this grove or let nature take its course.

Several groves of ***mixed woods*** (3) (comprised of trees and shrubs) are visible on the property retaining much or all of these trees and shrubs will aid in screening development immediately requiring less planting at the time of construction. In pastured woods, however, there will not be a shrub layer. Also located within the property is an extraordinarily large Silver Maple.

There are ***open pastures*** (4) on the school property. These are a resource for grazing and wildflowers. In addition, there are opportunities to use these pastures to visually extend the boundary of your development, helping fulfill the Parkway's vision of a boundless park.

There are active ***fields of crops*** (5) on the property. These are a visual and economic resource.

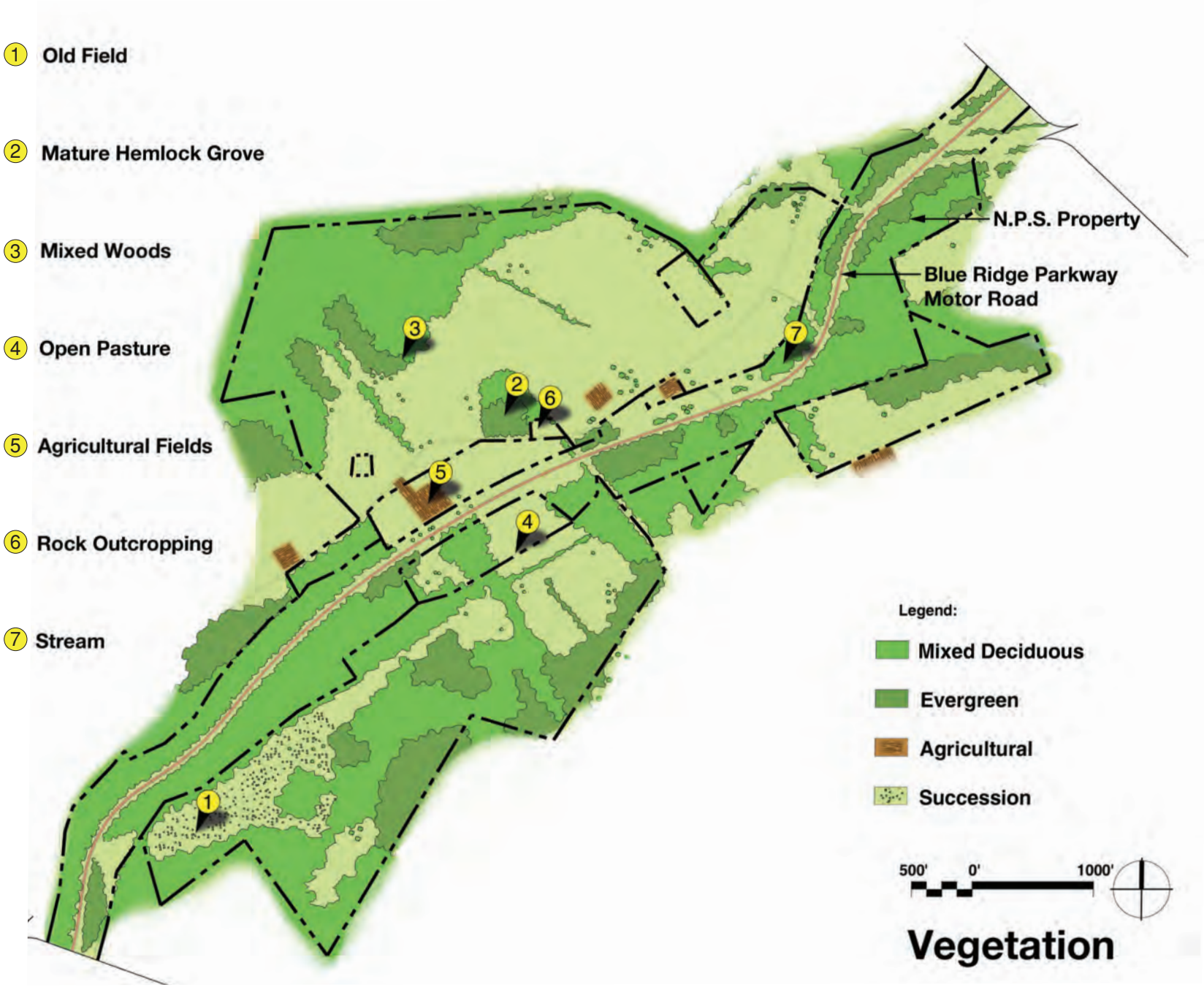
There is a ***rock outcropping*** (6) adjacent to the hemlock grove. This is a special habitat where mountain laurel and rhododendron are present.


Hemlock grove.


Mixed woods.


Open pasture.


Large Silver Maple.


1 Old Field
2 Mature Hemlock Grove
3 Mixed Woods
4 Open Pasture
5 Agricultural Fields
6 Rock Outcropping
7 Stream
N.P.S. Property
Blue Ridge Parkway
Motor Road
Legend:
Mixed Deciduous
Evergreen
Agricultural
Succession
500'
0'
1000'
Vegetation

Special Natural Resources

What are they?
In addition to the vegetation, wetlands, and other resources previously discussed, there are additional special resources that need careful study. These include protected, endangered or threatened species (often referred to as PETs by environmental planners). While private development is less regulated for protected or threatened species, these special species and their habitats should be preserved from development.

How to identify them?
The first step in identifying special natural resources is to contact the appropriate state agency for expert assistance. Both the Virginia Department of Conservation and Recreation, and the North Carolina Department of Environment and Natural Resources maintain lists of known endangered species sites as part of their Natural Heritage Programs. The information is available online in a general format and to qualified consultants and planning agencies. Specific details may be restricted as a protection measure; however, responsible agencies generally will assist property owners in researching these special species and their habitats, as it is in the interest of all to ensure their survival. For information, see the following websites:

Virginia - http://www.dcr.virginia.gov/natural_heritage/inventory.shtml
North Carolina - http://www.ncnhp.org/Pages/countysummaries1.htm

If a PET is present or has the potential to be present, be environmentally responsible and hire a wildlife biologist to record any species or special habitats.

It is also a good rule of thumb to inventory predominant wildlife, including fish, aquatic life, and vegetation in to determine appropriate measures to preserve natural ecosystems and maintain important habitats.

The Endangered Species Act

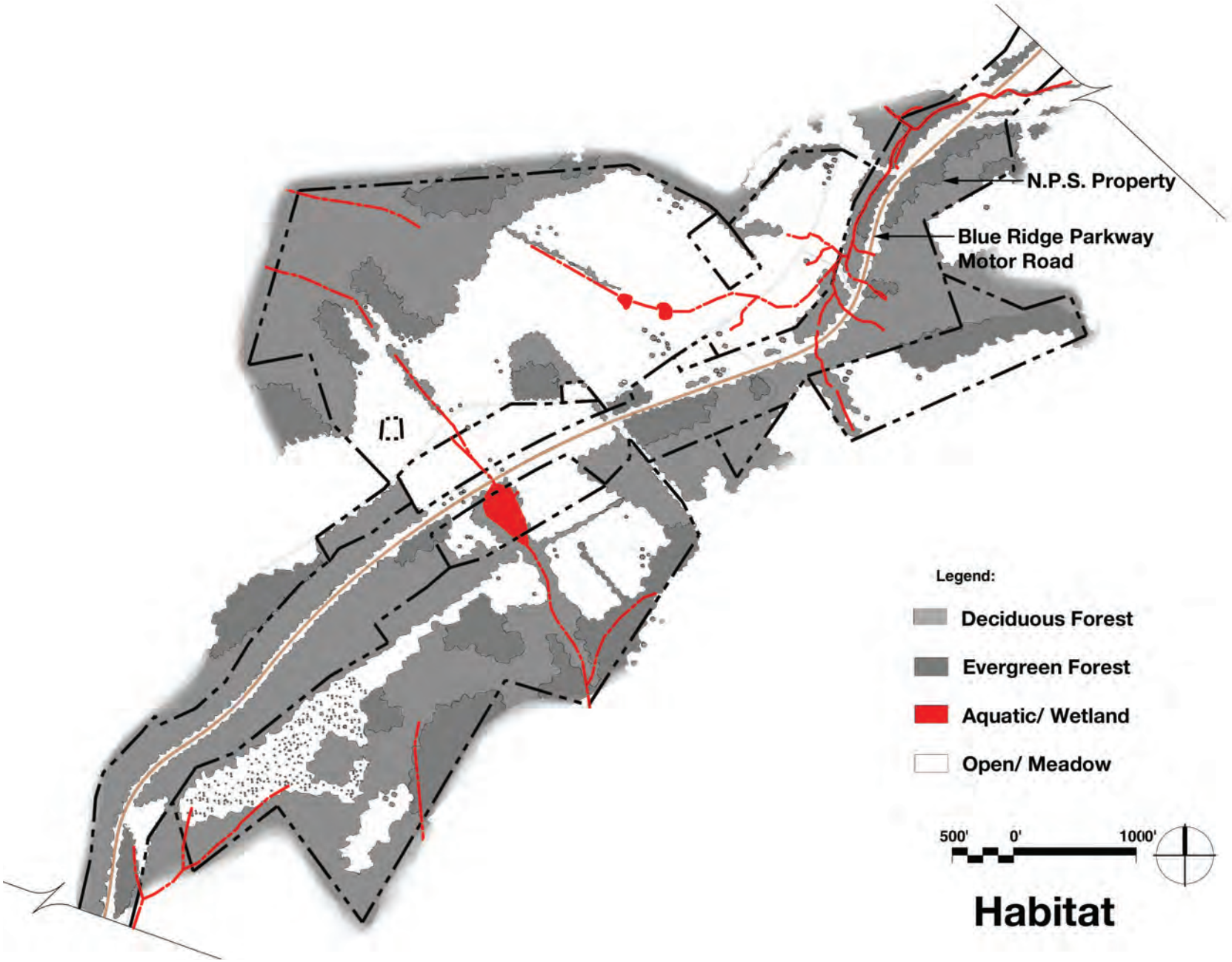
Created in 1973 and reauthorized in 1988, the endangered species act regulates activities affecting plants and animals designated as endangered or threatened. An "Endangered Species" is an animal or plant in danger of extinction. A "Threatened Species" is any animal or plant that is likely to become endangered within the foreseeable future.

Habitat:
Particularly important for land development, the act prohibits taking (including harassing, harming, pursuing, hunting, shooting, wounding, trapping, killing, capturing, or collecting) any endangered species within the United States and its territorial seas. Prohibitions apply to endangered species, their parts, and products. Most of these restrictions also apply to species listed as threatened.

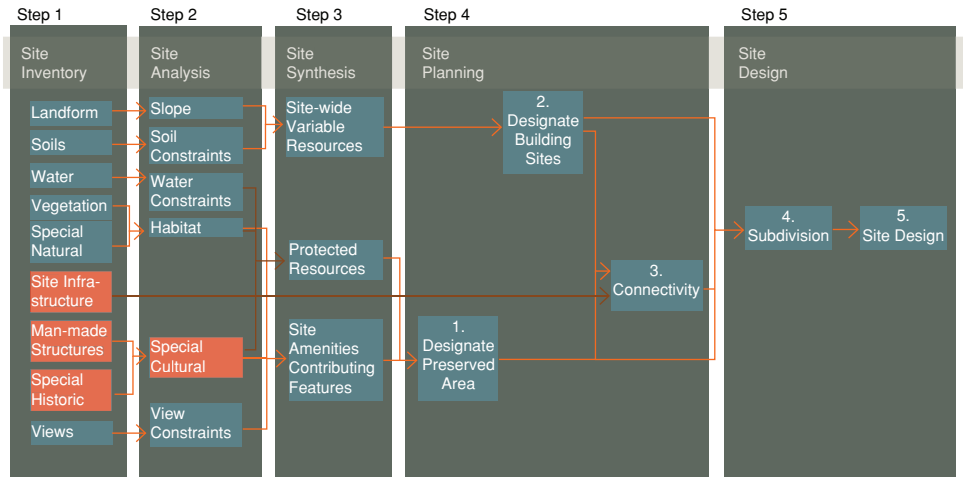
Penalties:
Violators of the Endangered Species Act are subject to fines of up to $100,000 and one year imprisonment. Organizations found in violation may be fined up to $200,000.

Rewards:
Individuals providing information leading to a civil penalty or criminal conviction may be eligible for cash rewards.

For additional information, refer to the University of Minnesota Laws Regarding Wildlife website:
http://www.tc.umn.edu/~dev00028/laws.htm


N.P.S. Property
Blue Ridge Parkway
Motor Road
Legend:
Deciduous Forest
Evergreen Forest
Aquatic/ Wetland
Open/ Meadow
500'
0'
1000'
Habitat

Cultural Resources





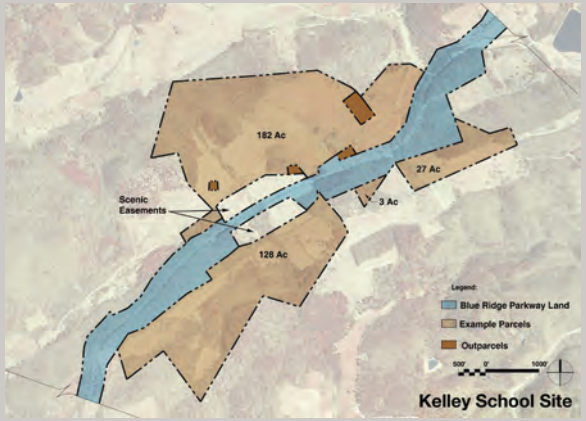
Above is a typical metes & bounds map that would be available to a homeowner.

Cultural Resources include man-made structures and features, and supporting development infrastructure. These may be significant because of their history, or their character. The following paragraphs will help you understand the impact of these resources on your development and their significance to the Blue Ridge Parkway.

Site Infrastructure and Local Codes

What are they?

American Heritage Dictionary defines infrastructure as "the basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions." Most properties along the Blue Ridge Parkway are connected to some form of infrastructure, such as roads or utilities. Water, sewer, power, and telephone were the 20th century infrastructure standards. New systems are always appearing, like cable television and broadband



Above is an aerial photo with a metes & bounds map showing private parcels owned, Blue Ridge Parkway Land, protected adjacent lands, and easements.

A few terms that you may encounter:

1. Monuments: The Parkway land has been surveyed, and concrete monuments are placed at many of the corners, and occasionally along the boundary. These are permanent, about 6" above the ground, with a bronze corner etched exactly where the corner belongs. These serve as good points-of-beginning for your boundary discussion.

2. Covenants: These are restrictions on a piece of property that limit its use. When the National Park Service or some Land Trusts sell a property, it may come with covenants, such as a restriction on the number of home sites. Developers also offer protective covenants as a way to keep their neighborhoods to certain standards. Examples might require a certain minimum-sized house, or that all large campers are stored in a central, out-of-the-way facility.

3. Scenic Easements: These are similar to covenants in their restriction of land. In the 1930s the Blue Ridge Parkway purchased a number of Scenic Easements on adjacent lands. This allowed the original farmer to continue farming on the land, but removed other rights, such as the right to build houses, or saw down specimen trees. There are 1800 acres of scenic easement lands adjacent to the Parkway. Each easement deed is adjusted to the specific resource that is to be preserved.

4. Deed Reservations: These appear on Parkway Land Use Maps as reserved rights that convey with another property. For example, a 10' road may be a deed reservation on Parkway lands, that is the only access way to an adjacent farm. There are 1200 deed reservations on Blue Ridge Parkway land.

internet. An inventory of the available infrastructure allows a developer to see how the proposed project may be connected to existing public systems and services. This translates into saved project costs and into a more amenity-filled development.

In addition to mapping infrastructure, it is important to research local building and development codes that may apply to your property. These include such items as land disturbance requirements (erosion controls, storm water management), zoning requirements (approved land use, setbacks, lot coverage, buffers, etc.), special districts (historic areas, conservation areas, watershed protection areas, etc.), property subdivision requirements (lot sizes, utility services, etc.), and applicable building or fire safety codes. Many of these codes define how you can use your property, where you can build and how improvements must be developed or constructed. In addition, you should check for planned utility and transportation corridors, as these can influence where and how you should build.

How to identify them?
In counties with GIS systems, there are maps of the existing infrastructure systems for public roads, sewer and water lines, and power and communication lines. These may be on the county website and available in layers that can be mapped. Local engineering or planning offices also are aware usually of planned new roads or utility extensions.

As you move from site planning and into design, detailed locations of existing and planned infrastructure will be necessary. A topographic survey can provide this level of information, which may include underground lines and recorded easements. The services of a trained surveyor experienced in field and courthouse research will be invaluable.

In addition to the location of infrastructure, you will need to consider the available capacity, as well as any planned improvements to accommodate

development. Conversations with the National Park Service and county officials will be very important. Sometimes your development may be assisted by the county or your proposal may influence the priority of future infrastructure. Permits are required to cross the Parkway with off-site utilities.

Stay informed of any future land use plans in the area, as they may affect your property. Typically, localities adopt future land use plans as part of a county-wide comprehensive plan. Your development may play a role in desired county initiatives, such as a regional trail, agricultural preservation district, or new road connection.

EXAMPLE: Infrastructure & Local Codes of Kelley School Property

The map to the right shows the existing infrastructure and building area of the Kelley School Property. This property is in a rural district, but still has some important existing infrastructure. Many features may be similar to those of your site.

Public roads cross the site on the north side of the Parkway.

A ***deeded, reserved access*** crosses the Parkway just east of the scenic easements.

Distribution lines for ***electricity*** parallel the road.

Setbacks from roadway centerlines and property line setbacks are shown in red. These define the development area or "building envelope."

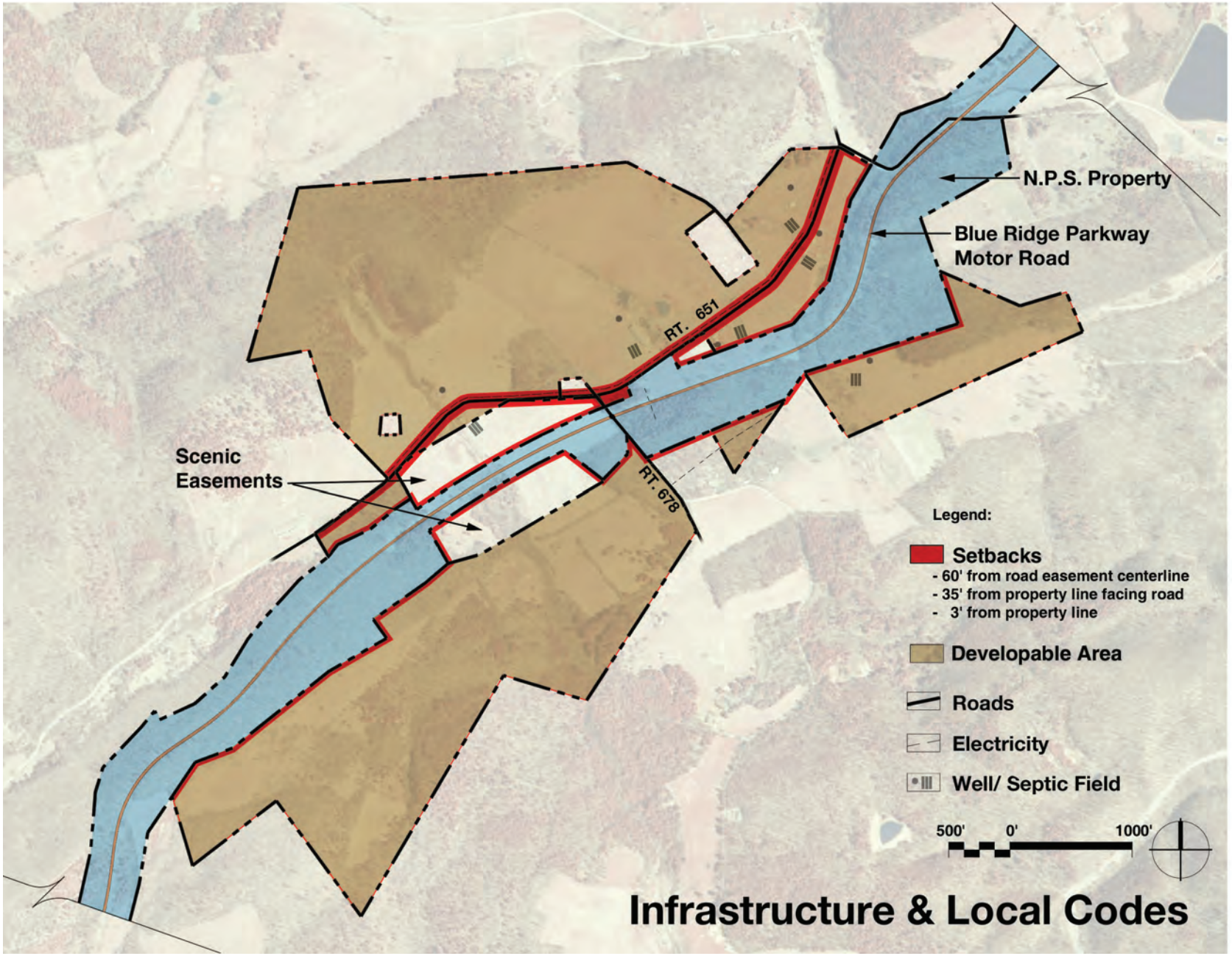
Because this is in a rural part of the Blue Ridge Parkway, there is no public ***water or sewer***. The existing houses are on wells and septic systems, which would be documented by a surveyor.



Public road is part of the infrastructure on the Kelley School Property



Utility corridor is also infrastructure on the property.


N.P.S. Property
Blue Ridge Parkway
Motor Road
RT. 651
RT. 678
Scenic
Easements
Legend:
Setbacks
- 60' from road easement centerline
- 35' from property line facing road
- 3' from property line
Developable Area
Roads
Electricity
Well/ Septic Field
500'
0'
1000'
Infrastructure & Local Codes

Man-Made Structures

What are they?

Man-made structures are those buildings and site features that have been constructed by people. This includes houses, barns, corn cribs, springhouses, and other structures erected on a site. Sometimes, these resources are amenities; other times, they are liabilities that should be removed. With each structure there may be infrastructure that should be retained, such as a well or septic field. In addition, other man-made features of the landscape may be important to keep such as roads, culverts, trails, cemeteries, stone walls, and fences, and Parkway corner monuments. These provide continuity to the landscape for future additions.

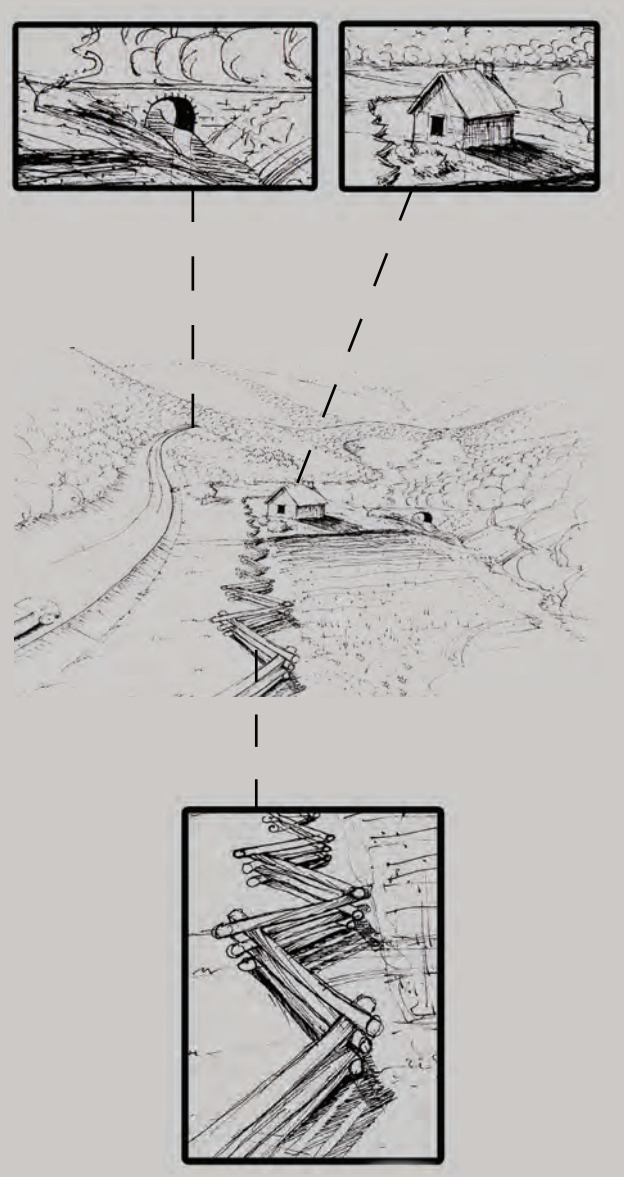
How to identify them?

A topographic survey is a good starting point for locating houses and barns. A survey should include fence lines and walls; however, you should supplement the survey with a thorough field verification and additional mapping of the cultural resources of your site. For example, all buildings in a farm complex should be mapped, as well as any wells, septic fields, and utility areas.

Special Historic Features

What are they?

Each property has specific man-made structures that have heightened importance because of their history. These include archaeological or historical sites, as well as significant architectural features such as stone walls or barns. In addition, there may be sites of significance on your property that are not visible on a walk through the property. These may include sub-surface archaeological artifacts or other features such as an unmarked cemetery. When considering development options, avoid disturbing archeological and historic features.



Typical man-made features along the Blue Ridge Parkway.

How to identify them?
Both the North Carolina and Virginia state historic preservation offices keep official registers of historic and archaeological properties. Much of the information is available online. Remember, too, that many important properties may not be inventoried or mapped. First, check with these state agencies to see if an architectural or archaeological resources survey has been completed for your county. The local library also is a good source and usually has a copy of any published inventory. Talk with someone in your local preservation or historic society; local historians have a lot of information that may not be mapped or written in the history books. Remember, too, that many local jurisdictions have implemented local historic districts that protect important properties; these should be mapped on the county's GIS system or they can be obtained from the local planning or engineering office.

To find whether a property is listed on the National Register of Historic Places, or the State Register of Historic Places, go to these websites:

Virginia: http://www.dhr.virginia.gov/registers/register.htm

North Carolina: http://www.hpo.dcr.state.nc.us/nrlist.htm

There can be significant federal tax incentives for rehabilitation of these structures if you follow the Secretary of Interior's Standards for Rehabilitation. In addition, both Virginia and North Carolina offer other state tax incentives for historic property rehabilitation. It pays to know the history of your property and to prepare and follow a well-thought-out development plan.

Cultural Resources Map

A cultural resources map includes man-made structures and special historic structures or archaeological features. This map tells a story of your property, about the development that has emerged over time. These are important areas to preserve and enhance as an amenity for your development.

EXAMPLE: Cultural Resource Structures of the Kelley School Property

The map to the right shows man-made and special historic structures on the Kelley School Property. Many features may be similar to those within your site.

The ***East Cemetery*** (1) on the eastern property line is fenced; it is officially not a part of the property.

The ***West Cemetery*** (2) is located near the farm compound.

The ***historic Kelley Schoolhouse*** (3) is in the center of the property near the Parkway.

The ***Blue Ridge Parkway*** (4) is a National Historic Landmark, and an All American Road.

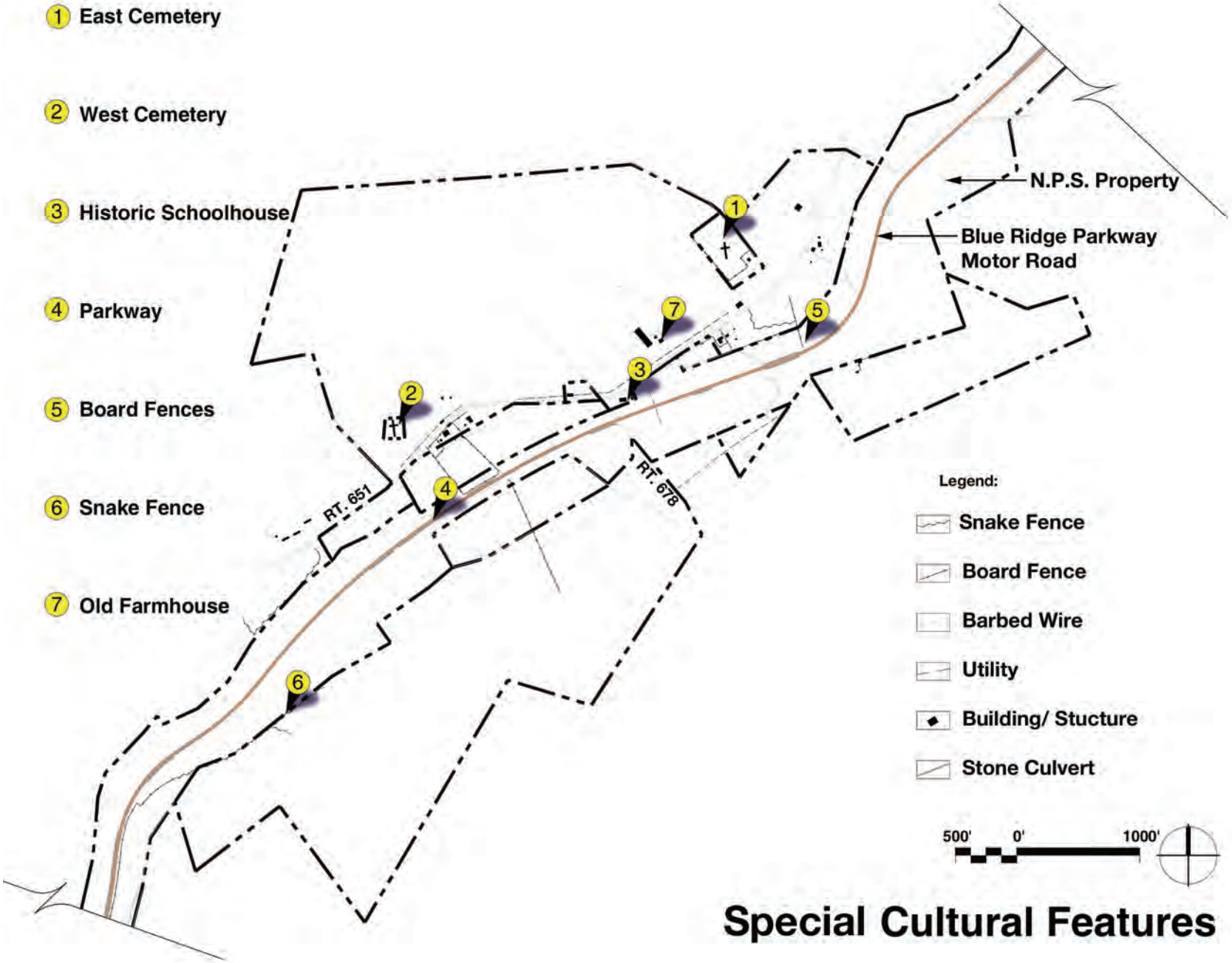
There is a scenic ***board fence*** (5) around the gardens near one of the farmhouses.

A chestnut rail ***snake fence*** (6) is near the parkway at the southwest corner of the property. This is a contributing feature to the Parkway's character.

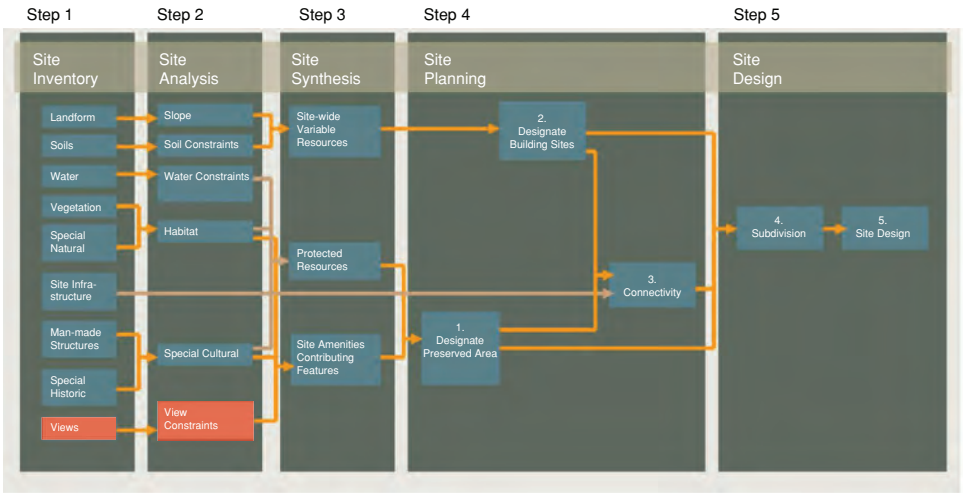

Historic Kelly School House.


Board fence.


West Cemetery.


1 East Cemetery
2 West Cemetery
3 Historic Schoolhouse
4 Parkway
5 Board Fences
6 Snake Fence
7 Old Farmhouse
N.P.S. Property
Blue Ridge Parkway
Motor Road
RT. 651
RT. 678
Legend:
Snake Fence
Board Fence
Barbed Wire
Utility
Building/ Stucture
Stone Culvert
500' 0' 1000'
Special Cultural Features

Visibility & Views

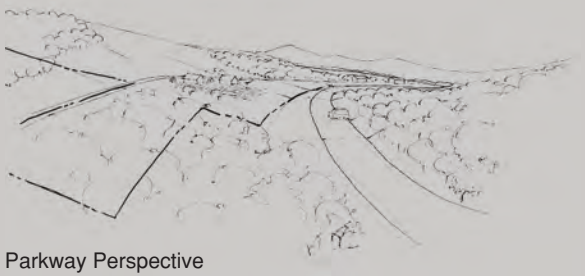


Views

What are they?

Attractive views, both to and from your property, contribute not only to the scenic quality of your development, but may also increase the value of the property. To maintain the overall visual quality of your property's setting and that of your neighbor, the Blue Ridge Parkway, it is very important to understand what you can see from the Parkway and to not negatively affect those views. Views from the Parkway to consider may include: deciduous and evergreen forests, waterfalls, steep cliffs, rolling farm fields and open meadows. The successful use of views within your development depends on recognizing important topographical characteristics incorporating the visual landscape into your development plan.

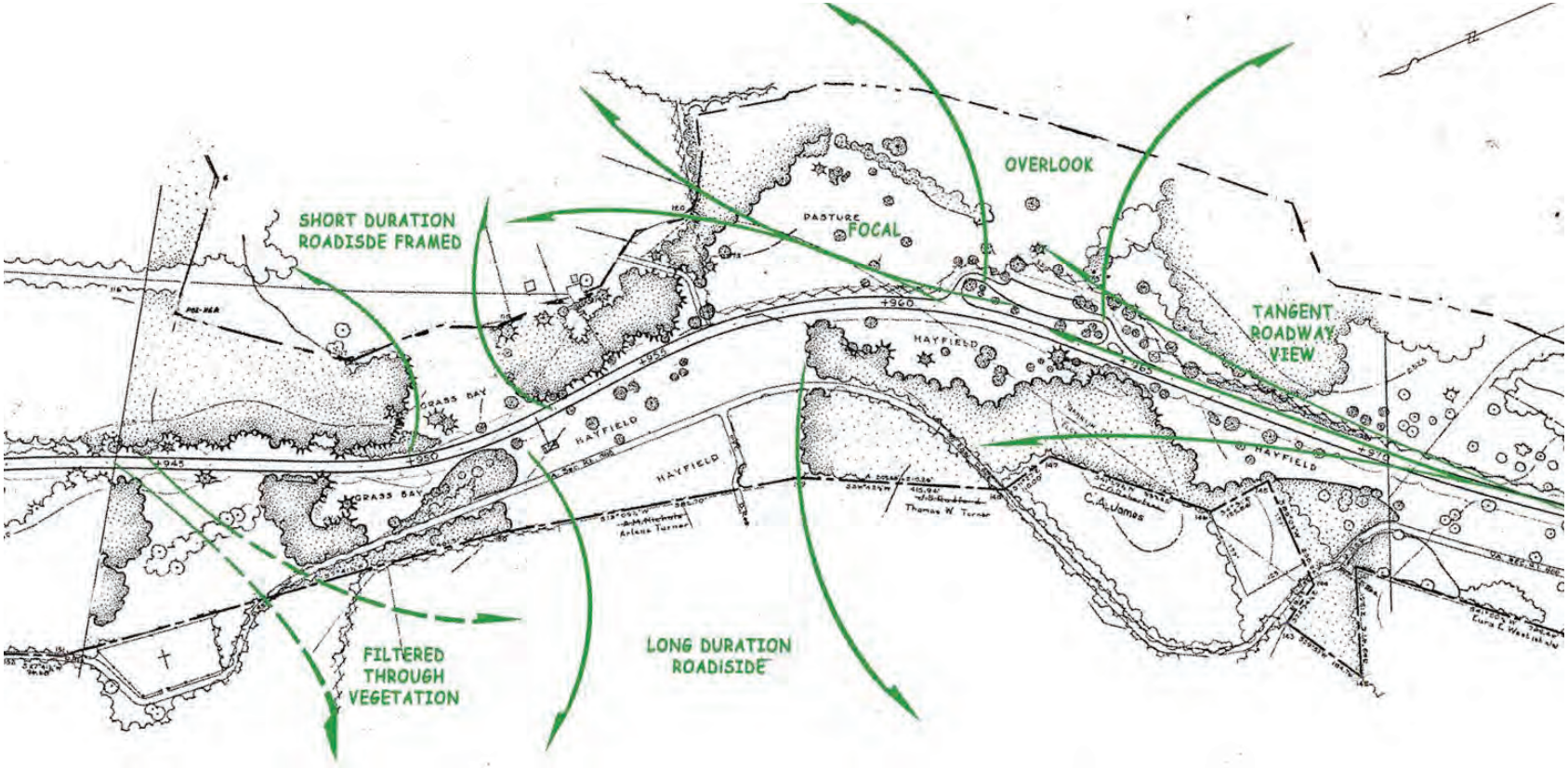
Page 2.43 shows a Parkway Land Use Map (PLUM) annotated to describe views from the parkway. Originally developed by Parkway landscape architects to guide land management of the parkway, they are still a valuable resource in that they show important viewsheds for the parkway experience. They are also a good source to locate important natural and cultural features. This map illustrates how " your back yard is the Parkway's front yard."



Parkway Perspective



Views from Parkway: Some areas of a site are hidden from view of the Parkway by landform or orientation.



Blue Ridge Parkway Landscape Architect David Anderson shares his techniques for considering views:

Above: PLUM annotated for views.
Below: Landscape Architect's terms used on a panorama of the Kelley School Property.



What types of Views?

Four general types of views can be categorized along the Parkway:

Panorama:
A panorama is a composition, which at eye level, is more than 50% sky, with the view appearing below the observer.

Focal:
A focal view is a composition that draws the eye to one vanishing point on the horizon with lines in the view (like roads, rivers, trails) that lead directly to that point.

Feature:
A feature is a composition that has a single, dominant focal point in the fore or middle ground of the view, such as a waterfall, Mabry Mill or a named mountain top.

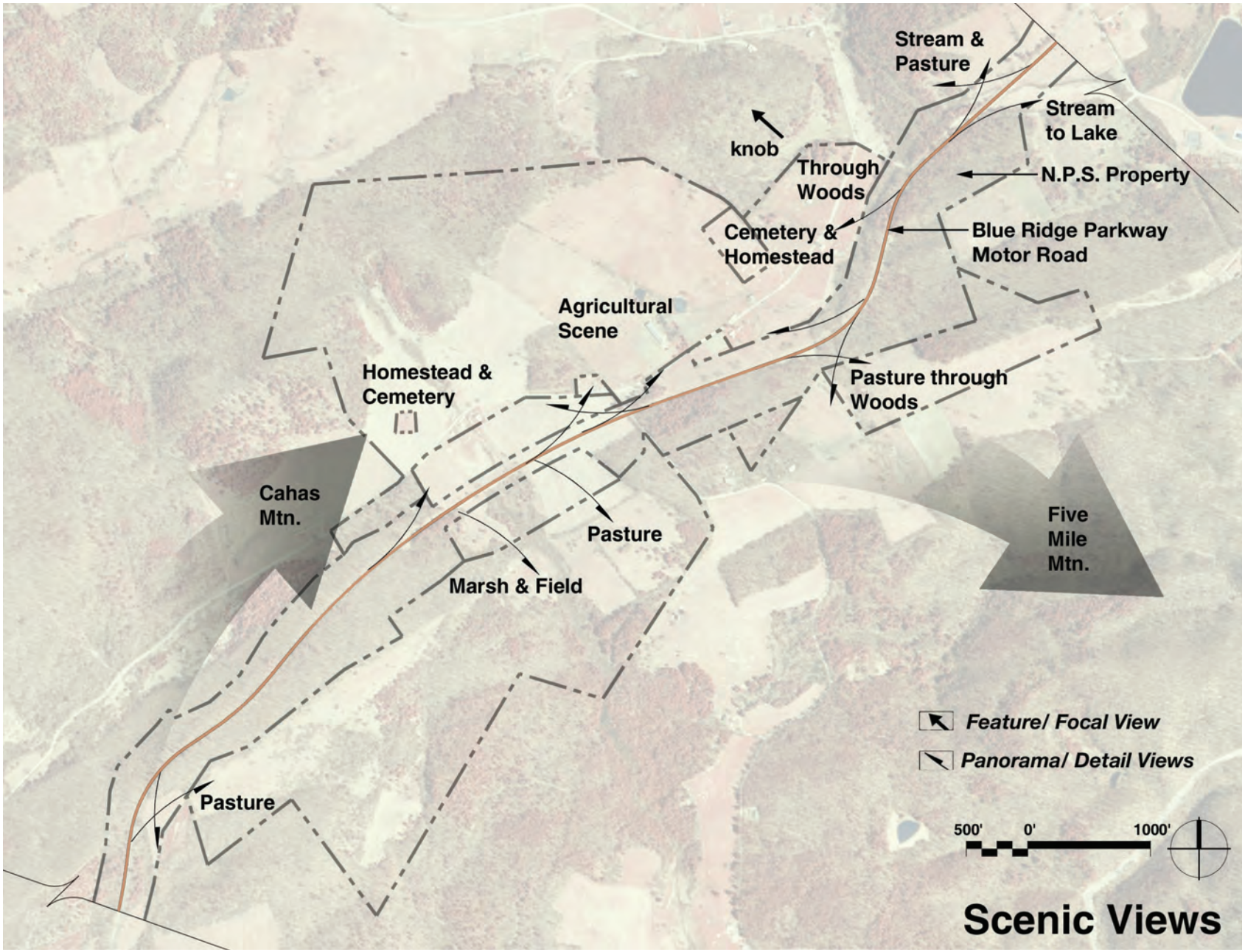
Detail:
A detail is a composition that is completely foreground, close enough to touch.


Focal


Panorama


Feature

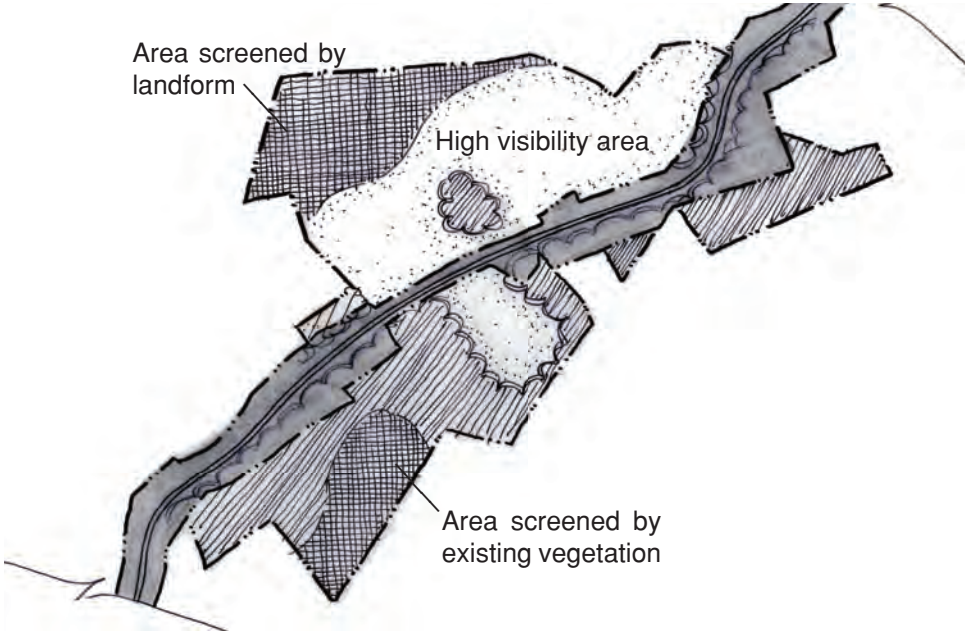

Detail


Stream &
Pasture
Stream
to Lake
knob
Through
Woods
N.P.S. Property
Cemetery &
Homestead
Blue Ridge Parkway
Motor Road
Agricultural
Scene
Homestead &
Cemetery
Pasture through
Woods
Cahas
Mtn.
Pasture
Five
Mile
Mtn.
Marsh & Field
Pasture
Feature/ Focal View
Panorama/ Detail Views
500'
0'
1000'
Scenic Views

How to identify them?
Two maps may be generated to understand important views. The first one is a very simple map that can be created by driving or walking the Parkway and noting which areas of your property can be seen.

The generally accepted standard for identifying views is to drive the Parkway, look for breaks in the roadside vegetation where your property is visible, and then map where the property is seen. Use a USGS quad map or topographical map and simply mark the places along the Parkway where your property is visible. Draw circles around those areas to highlight them. Because the view changes depending on your approach, be sure to drive or walk it each direction. Walk it during each season, as the view will change.

Try to incorporate the four types of views (focal, feature, panorama, and detail) into this assessment. This method accounts for subtleties such as vegetation and structures that can hide some of the landscape.

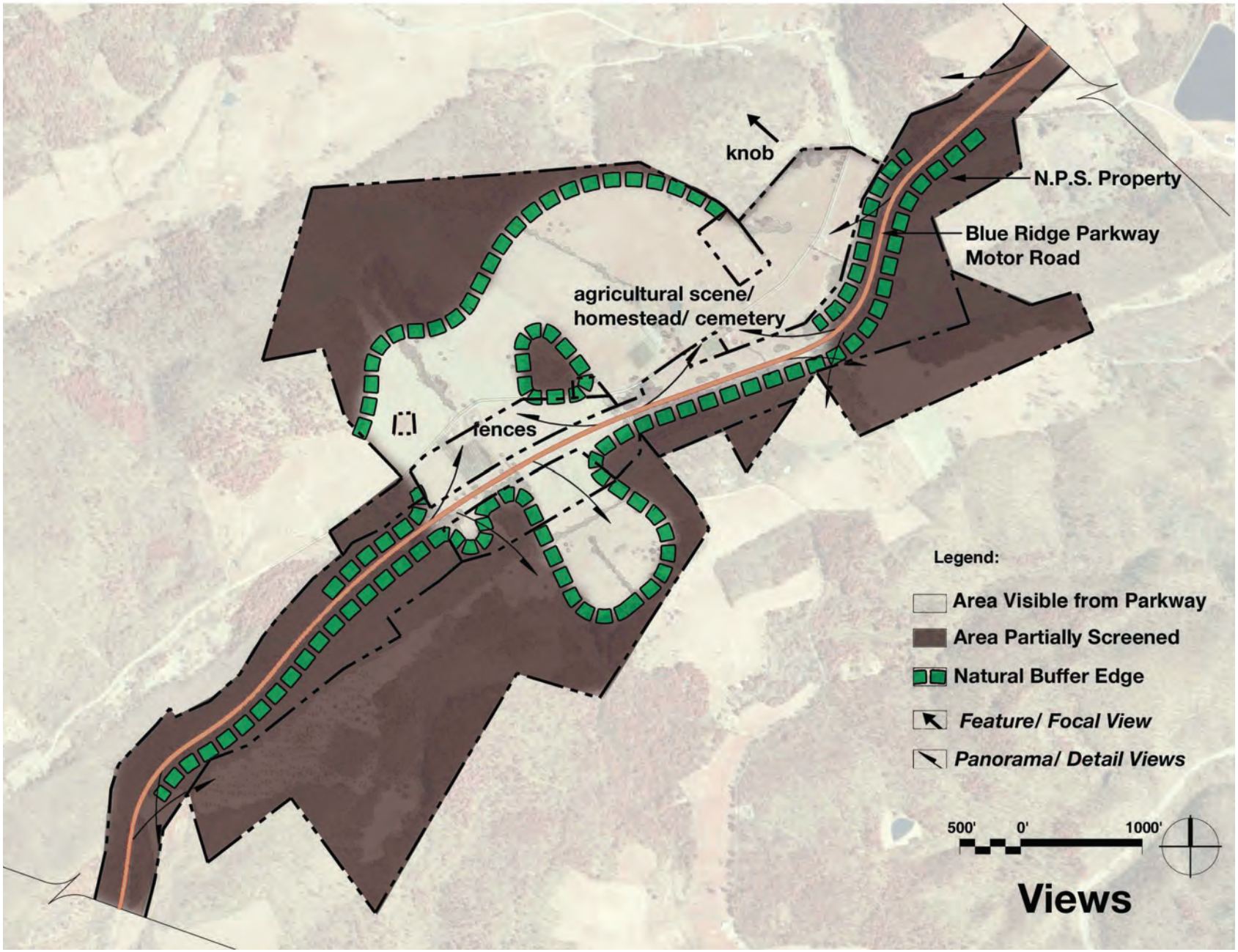



Agricultural scene.


Knob.


Fences.

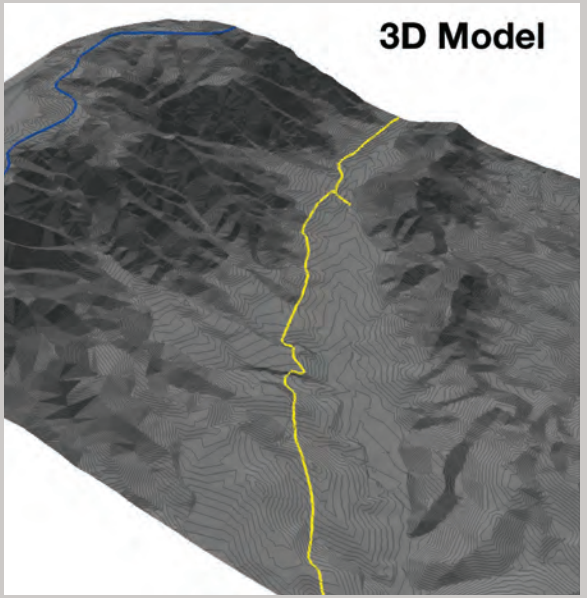

Screening woods: in the winter, they allow 25% visibility, in the summer, virtually no visibility.


knob
N.P.S. Property
Blue Ridge Parkway
Motor Road
agricultural scene/
homestead/ cemetery
fences
Legend:
Area Visible from Parkway
Area Partially Screened
Natural Buffer Edge
Feature/ Focal View
Panorama/ Detail Views
500'
0'
1000'
Views

A second method of mapping views is to create a viewshed frequency map. The Blue Ridge Parkway can supply you with a viewshed frequency map using a computer generated model that records the number of times your property is seen from the Parkway. Because the viewshed frequency map considers only topography, it is most useful in describing how often a particular part of the property can be seen; it does not specify what is visible.

The map on page 2.49 is a computer generated map of the viewsheds of the Kelley School property from the Blue Ridge Parkway. The most visible areas are in yellow and red. We will use this map to develop a view constraints map in the next section.

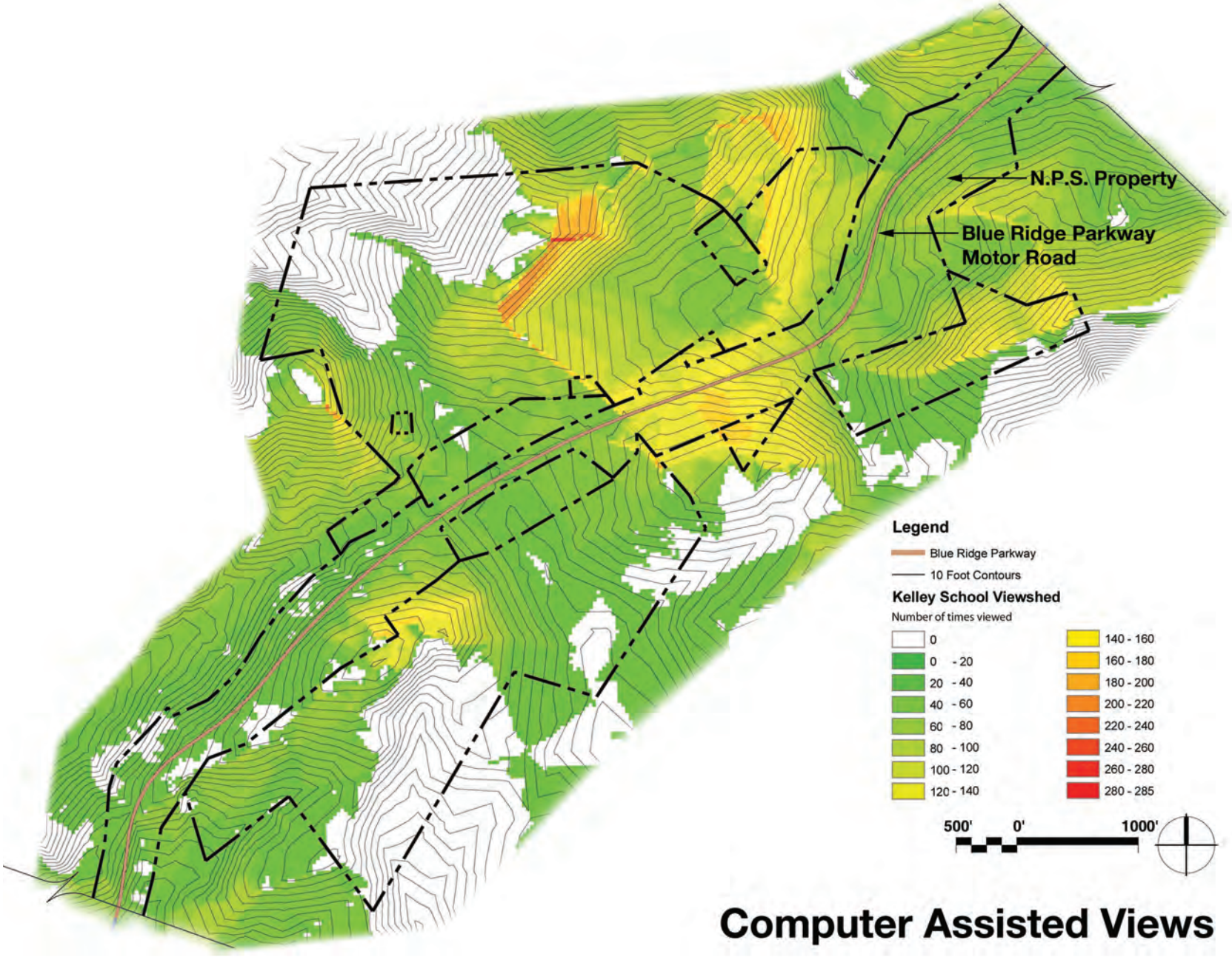
Compare your viewshed map that is field-generated with the one provided by the Parkway. Adjust it for any areas that are missed. Now, you are ready to generate the view constraints map which will guide your development decisions.



3D modeling for visual inventory.



Views from Parkway: generated from 3D model above.



Computer Assisted Views

View Constraints

What are they?
View constraints are those points on a property that are visible from the Parkway with potential to affect views from the Parkway. These points include areas that are seen with the greatest frequency, or areas that may be focal points seen from the road. In addition, a view constraints map should show areas that may not be visible or slightly visible from the Parkway -- areas with little or no visual constraints.

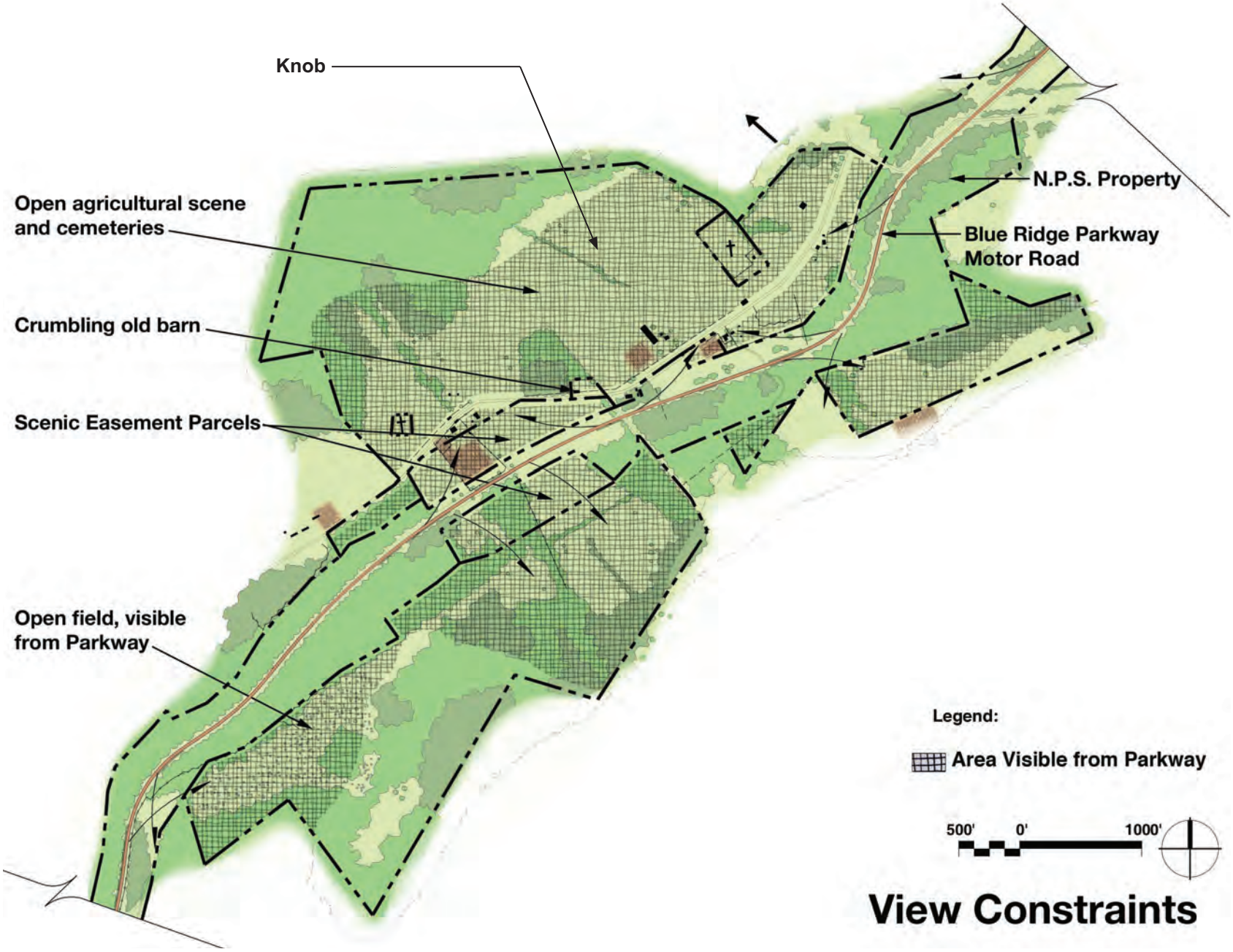
How to identify them?
Starting with the viewshed frequency map generated by the Parkway, add your notes of the most visible and least visible places found during field investigation. Note any special views and compare to the four types of views discussed earlier (page 2.44). Using this information, determine the key areas of your property visible from the Parkway. These are the most sensitive areas for development.

EXAMPLE: View Constraints of the Kelley School Property
The map on page 2.51 shows the map and vegetation with annotations from field observations.

> The ***cross-hatched areas*** on the map illustrate the places seen most frequently by parkway drivers. The prominent knob (***feature***) landform on the north side is the most sensitive views on the property.
>
> Below this prominent feature, the open field facing the Parkway has characteristics of a ***panorama*** when viewed.
>
> There are many foreground views which may have feature ***detail views***, such as the snake fence in the open field on the southwest end of the property.

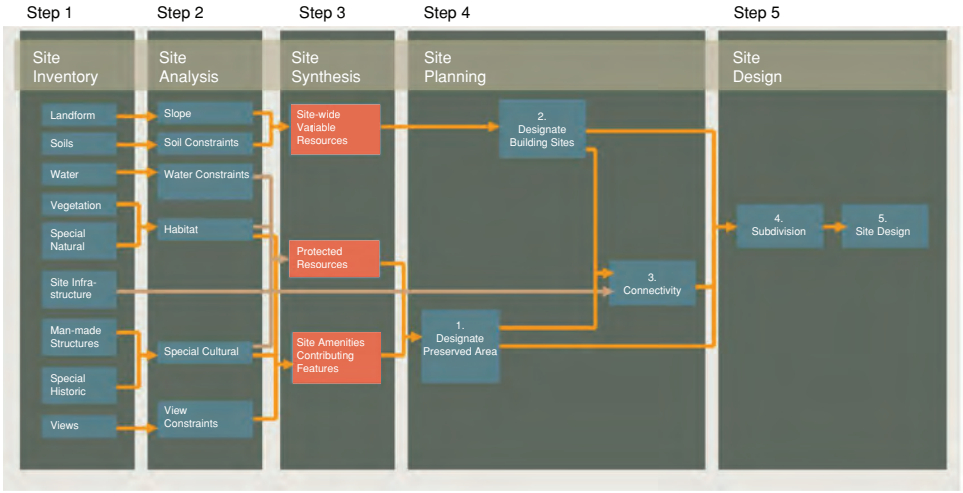
What about the trees? Don't they count for screening?

Landscape architects build evaluative models for visibility without the trees. Their absence illustrates a worst-case scenario. In a year, or even day, all the trees can be gone, due to fire, gypsy moth, disease, drought, etc. This will greatly affect the forests' ability to screen. So the trees are left off this analysis. They come back into play with the vegetation analysis.



View Constraints

Synthesis



Analysis pulls things apart. Synthesis puts them back together. Analysis maps isolate variables, and then synthesis maps combine those variables to get a clearer look at the potential amenity relationships, and the constraints of your property.

Once the inventory and analysis maps have been prepared, the synthesis process overlays this information to determine the best uses for your property.

Three sets of overlays are created that will guide the site planning and design process. The goal is to discover the best areas for development by ruling out areas that are less accommodating, more expensive to develop, are protected by law, or that contribute to the character of the site. The overlaid data may get cumbersome, but will provide a solid and logical background from which to begin your design and planning process. Landscape architects sometimes combine maps in a digital format and manipulate the data to screen back less important layers while featuring others.You can replicate this by moving the most important layers to the top,

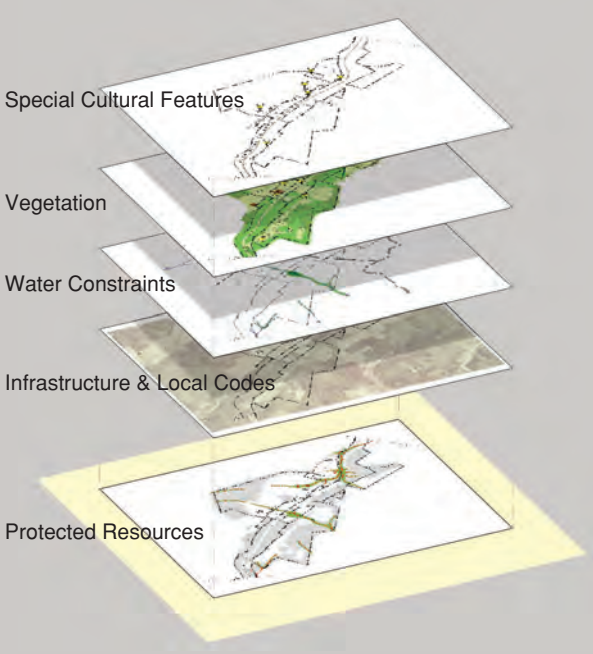
The first two sets of overlays are used to determine those portions of the site that should be set aside as preserved areas - the Protected Resources and the Site Amenities and Contributing Resources. These resources are absolutes - just leave them and design your development around them.

The third set of overlays is the Site-wide Variable Resources. Since these resources vary in intensity over the site, they will require experience and judgement to fully master. Variable resources come into play during the planning and design process and can either be worked around or overcome depending on project goals.

Together, the three site synthesis overlays will become the foundation of a good site planning and design strategy.

Protected Resources

The Protected Resources overlay shows those areas where development will not be allowed. It deals with absolutes that are protected by law, or are otherwise too difficult to alter. These include floodplains, wetlands, habitats of endangered species, locally-designated historic resources, some archaeological resources, cemeteries, and water bodies. Other resources that don't require being left completely alone, but rather must be accommodated may include existing driveway rights-of-way, required setbacks and areas that must be excluded to satisfy codes, power line or utility easements, and other manmade features that must be considered during design decisions.

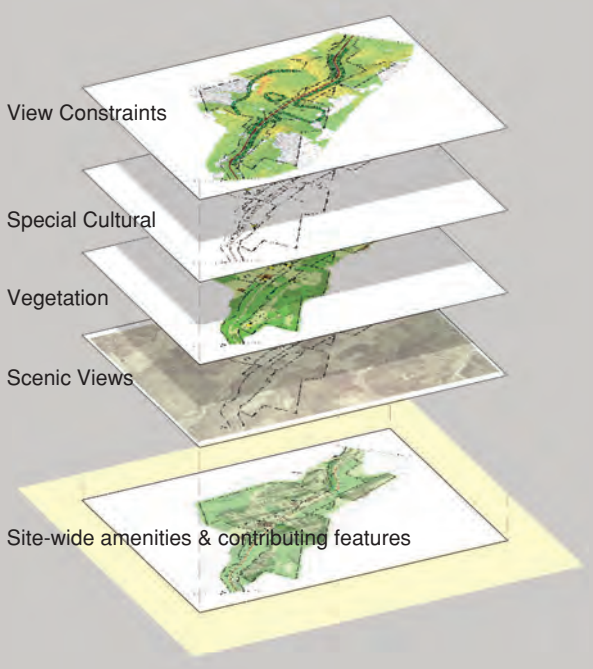


To make a Protected Resources Map, compile constraints from Special Cultural, Vegetation, Water, and Infrastructure and Local Codes.


N.P.S. Property
Blue Ridge Parkway
Motor Road
Legend:
Scenic Easements
Cemetery
Stream
Wetland
500'
0'
1000'
Protected Resources

Site-wide Amenities & Contributing Features

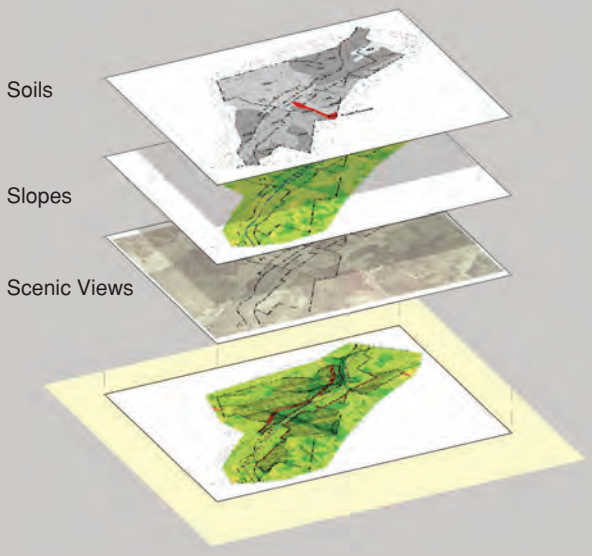
The site-wide amenities & contributing features of a property are those that lend character to the landscape. These resources might include the edge of the forest, fence rows, rock outcrops, waterfalls, and similar areas. Contributing resources add value to the property and they should be celebrated and incorporated through planning and design. The Site Amenities and Contributing Resources overlay shows areas which have potentially heightened value as common resources in your development. It is a lot cheaper and easier to incorporate existing amenities into your development, than to obliterate them and build new ones. Along the Blue Ridge Parkway, many sites have been occupied for well over a century. The management techniques that have survived on the site can provide valuable lessons for siting new facilities; the existing landscape composition has weathered years of environmental conditions and may offer guidance in terms of what to emulate and what to avoid. Remember, too, that many of the remnants of the past land use, like mature forests, or fertile meadows, may be amenities that offer value. Choosing these, in concert with the protected resources, saves time and money.



View constraints, Special cultural, Vegetation and Scenic Views are the basis of the Site-wide Amenities and Contributing Features map. Notice the areas out of view from the Parkway, and their resources. For example, the woods on the northwest are out-of-view and forested. It may make a great place for a wooded neighborhood. In the southwest corner, a similar area exists, but has a clearing, which might be a great place for a common meadow.



Site-wide Amenities & Contributing Features

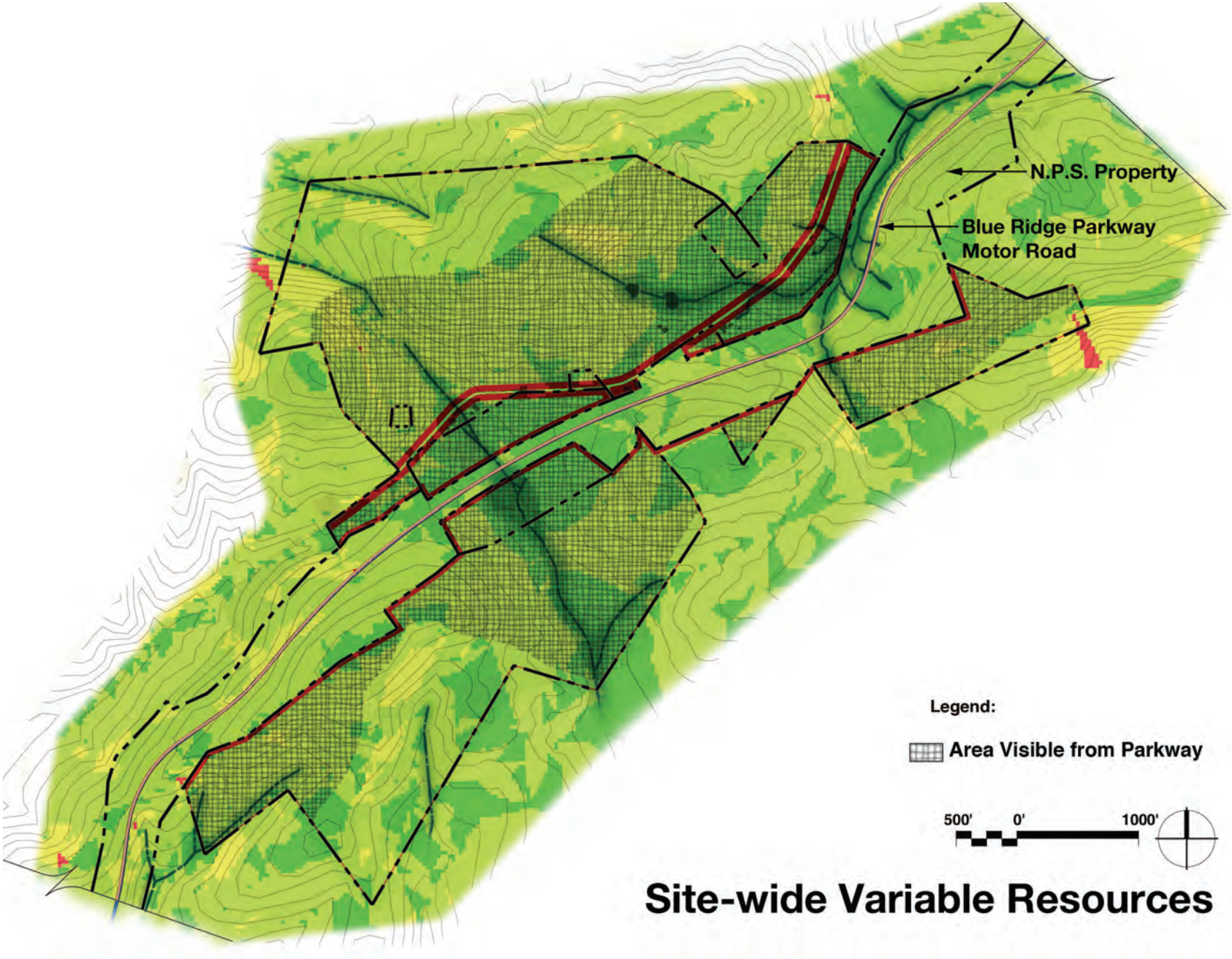


The Soils, Slopes and Scenic Views maps compose Site-wide Variable Resources. Where there are layers of built-up colors, there are more constraints.

Site-wide Variable Resources

The Site-wide Variable Resources overlay shows the features that cover the property entirely, and vary across the property, so it is a matter of determining the threshold that is proper for the program of the owner, design audience, and budget. Slope, soils, visibility from the Parkway, and habitat are examples.

Some planners darken all composite maps with the darker the color, the greater the constraint. So when it comes to compiling this Site-wide Variable Resources map, the darker the colors, the greater the constraints.



Site-wide Variable Resources



Chapter 3
Site Planning & Design

Once you have completed the site inventory and analysis process and synthesized the data to understand the landscape character, you are ready to design your project. The site design process utilizes the synthesis maps generated in Chapter 2. By isolating variables in a series of maps, each option can be considered separately, simplifying the site design process. The process to complete this series of maps is described in the steps that follow.

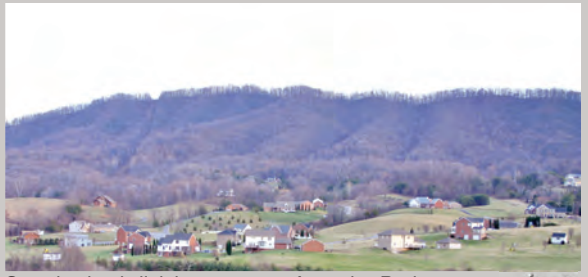
Consider Your Market

To maximize returns, remember that someone who is likely to be interested in buying into a development near the Blue Ridge Parkway wants to be there for a specific reason. Typically, these individuals value the principles of land conservation, habitat enhancement and sustainable design and they will not hesitate to invest in a development that boldly exhibits these attributes.

For example, real estate market research has shown that people prefer living in small towns that provide a real sense of community, as an alternative to the large, cookie-cutter subdivisions that characterize many new developments. People value an authentic way of life with open spaces and walking trails, and will pay more to live near those amenities. Surveys have found that 40-80% of people living in golf course developments have no interest in golf; rather, they like the wide-open view of the golf course from their windows. A potential Blue Ridge Parkway client will value the Parkway scenery ethic even if he never drives on the Parkway.



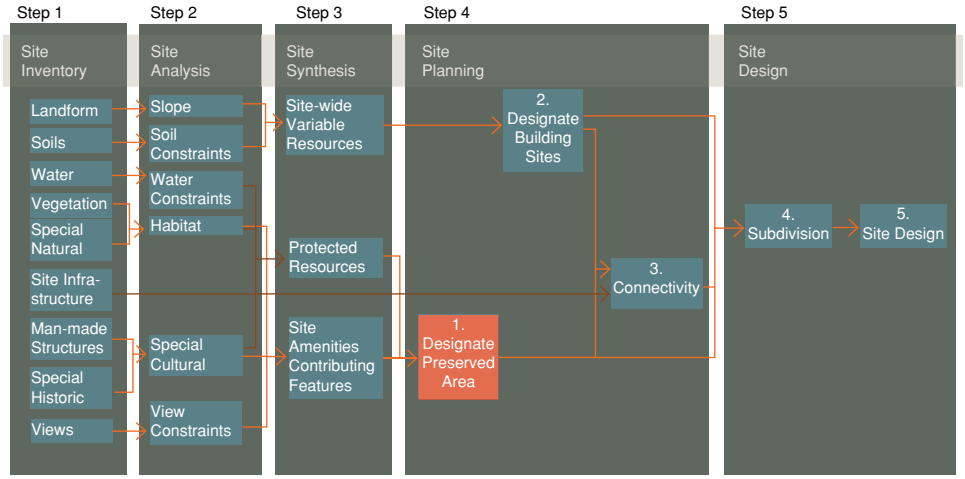
Village, as seen from the Parkway.

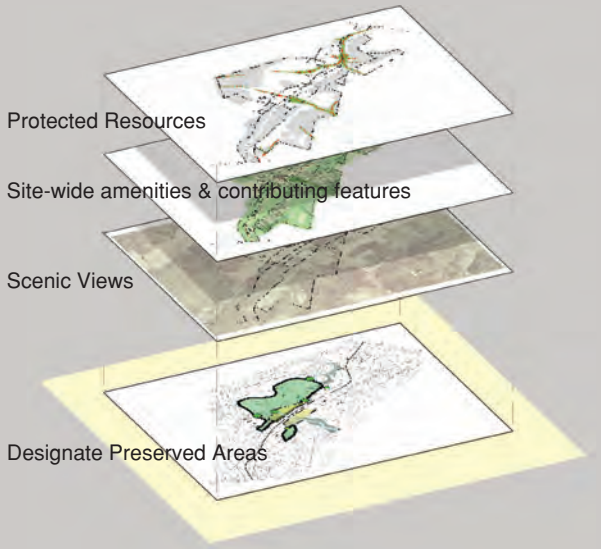


Standard subdivision, as seen from the Parkway.

As you begin your design, think of this as a once-in-a-lifetime development opportunity to place your stamp on one of the most beautiful regions in the world. With these principles in mind, the following sections will walk you through the remainder of the design process.

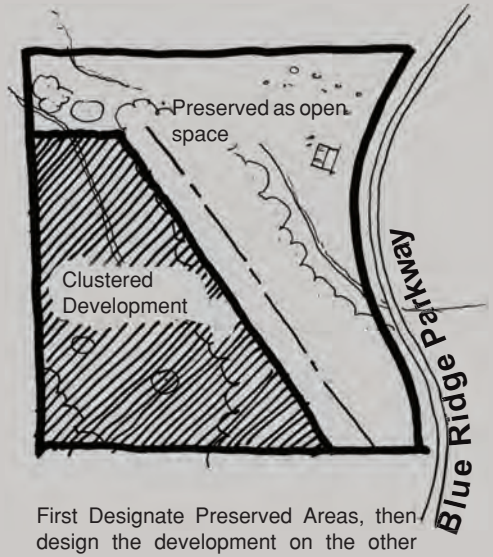
Step One: Designate the Preserved Areas



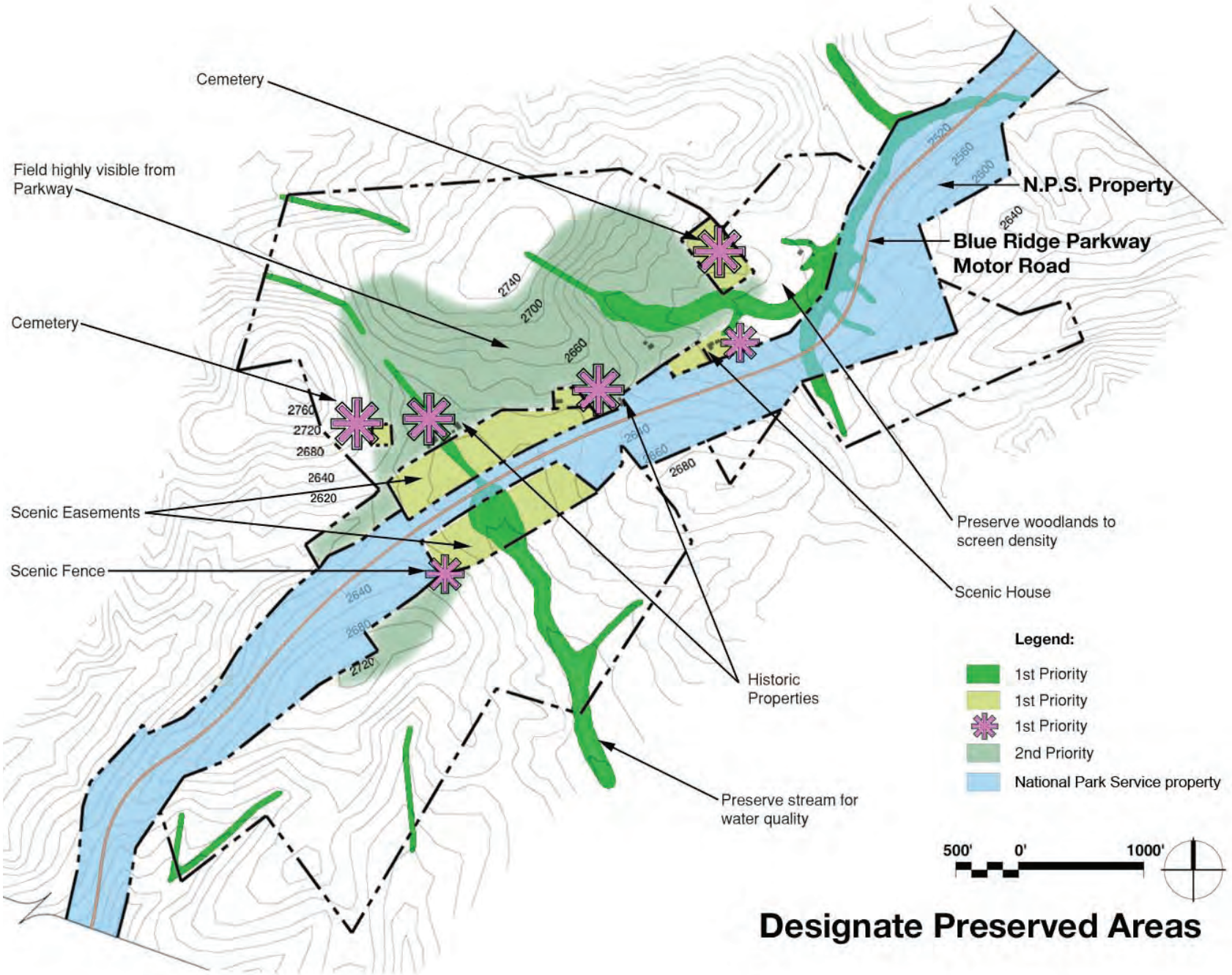


The difference between an ordinary design, and one that follows the character-sensitive design process, is that this process provides the background for you to incorporate the principles of land conservation, habitat enhancement and sustainable design. Remember that building roads and houses is all about modifying the land. Land that already exhibits a high degree of character needs little, if any improvement. This is where most subdivisions go wrong; valuable lands with natural and scenic beauty are compromised when haphazardly or carelessly outfitted with houses. Property values decrease and scenic character suffers. The feature most visible from the Parkway, such as waterfalls, steep slopes, buffers for streams, wetlands, and cemeteries are the perfect backdrop to open spaces. Add to these areas quality agricultural soils, healthy forests, and stream recharge areas and an inspired open space network begins to develop.

In recent years, **conservation subdivisions** have been embraced by planning and design professionals, as well as developers. Characterized thoroughly by the writings of Randall Arendt, particularly in his paper Growing Greener, (which describes our outlined and admittedly similar steps 1 through 4), this type of development emerged as a reaction to suburban sprawl which



First Designate Preserved Areas, then design the development on the other lands


Cemetery
Field highly visible from Parkway
Cemetery
Scenic Easements
Scenic Fence
N.P.S. Property
Blue Ridge Parkway Motor Road
Preserve woodlands to screen density
Scenic House
Historic Properties
Preserve stream for water quality
Legend:
1st Priority
1st Priority
1st Priority
2nd Priority
National Park Service property
500'
0'
1000'
Designate Preserved Areas

scatters houses across a subdivision to maximize development on the acreage, but results in loss of valuable open space. By contrast, a conservation subdivision is one which maximizes open space without reducing the amount of development permitted. Development is clustered in areas which can accommodate higher densities with the remaining open space set aside and preserved for the benefit of the development. It is important to note that there is no reduction in the number of buildings, just smarter clustering to achieve economy in utilities, roads, and other infrastructure costs.

Some growing jurisdictions along the Parkway have adopted cluster ordinances that allow for conservation subdivisions which include the same housing types and gross densities permitted by zoning. Sometimes there may be bonus densities permitted for a cluster subdivision. In addition, a Planned Unit Development (PUD) ordinance may be utilized to pursue a conservation subdivision. Prior to beginning your design, consult the local planning office to determine which zoning districts apply to your property and whether these districts permit conservation or creative subdivision. Early discussions can be enlightening.

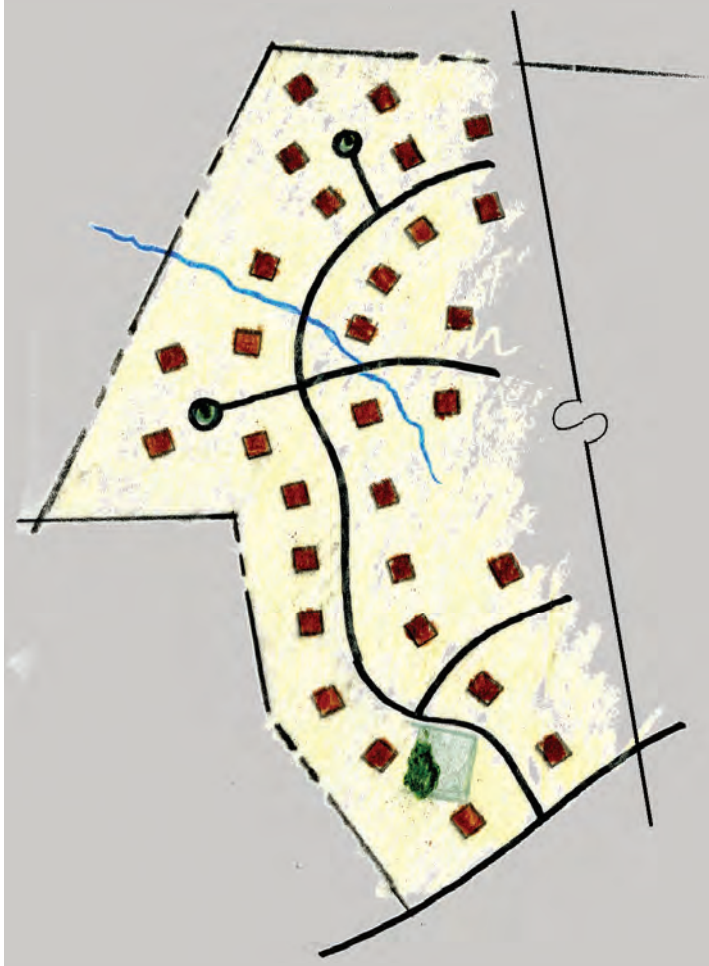
More information on conservation subdivisions is included at the end of this chapter.

Natural and Cultural Feature Preservation

In developing a property, appropriately locating new facilities is the most important factor in achieving visual harmony with the Parkway. Choosing the appropriate building location will save time and money. Incorporating existing **natural** and **cultural features** as amenities will increase the value of your development.

Natural features, such as streams, wetlands, rare plants, and sensitive wildlife habitats must be considered when selecting the areas to be developed.

Non-Conservation Subdivision



30 Standard Subdivision Lots
- 60 Acres
- 30 Houses
- 1 Acre Preserved

Conservation Subdivision



30 Conservation Subdivision Lots
- 60 Acres
- 30 Houses
- 30 Acre Preserved

Protected, Endangered and Threatened species (PETs) also must be considered when selecting a building site. Also remember that many natural resources may include a buffer zone that must be avoided.

Cultural features, such as archaeological artifacts, historic buildings, or other features identified in a cultural resource survey should be avoided when selecting areas on your property for new development.

In the example Kelley School site, these resources are incorporated into the open-space planning concept, begun on page 3.5.

View Preservation and Enhancement

Each year, approximately 20 million visitors travel the Blue Ridge Parkway. A poorly-sited building, garage or utility building can have a dramatic impact on the views from the Parkway. Impacts can be minimized by referring to the Parkway Land Use Maps (PLUMs). To effectively integrate this information into your development, use the visibility map that you generated in the previous chapter. This will provide you with map of all places that can be seen from the Parkway and enable you to site development in an unobtrusive and sensitive manner. Pay particular attention to key views including focal views, features, panoramas and detailed views, as described in Chapter 2.

Use PLUM maps and your visibility map to locate facilities and preserve important vistas. Remember that topography plays an important role in visibility. Topography can highlight certain features, while screening or blocking the views of others. **Topographically visible** sites are those that can be seen from the Parkway if all vegetation was removed. Vegetation can be used to supplement the topography, providing additional screen. This is discussed in greater detail in Chapter 4.

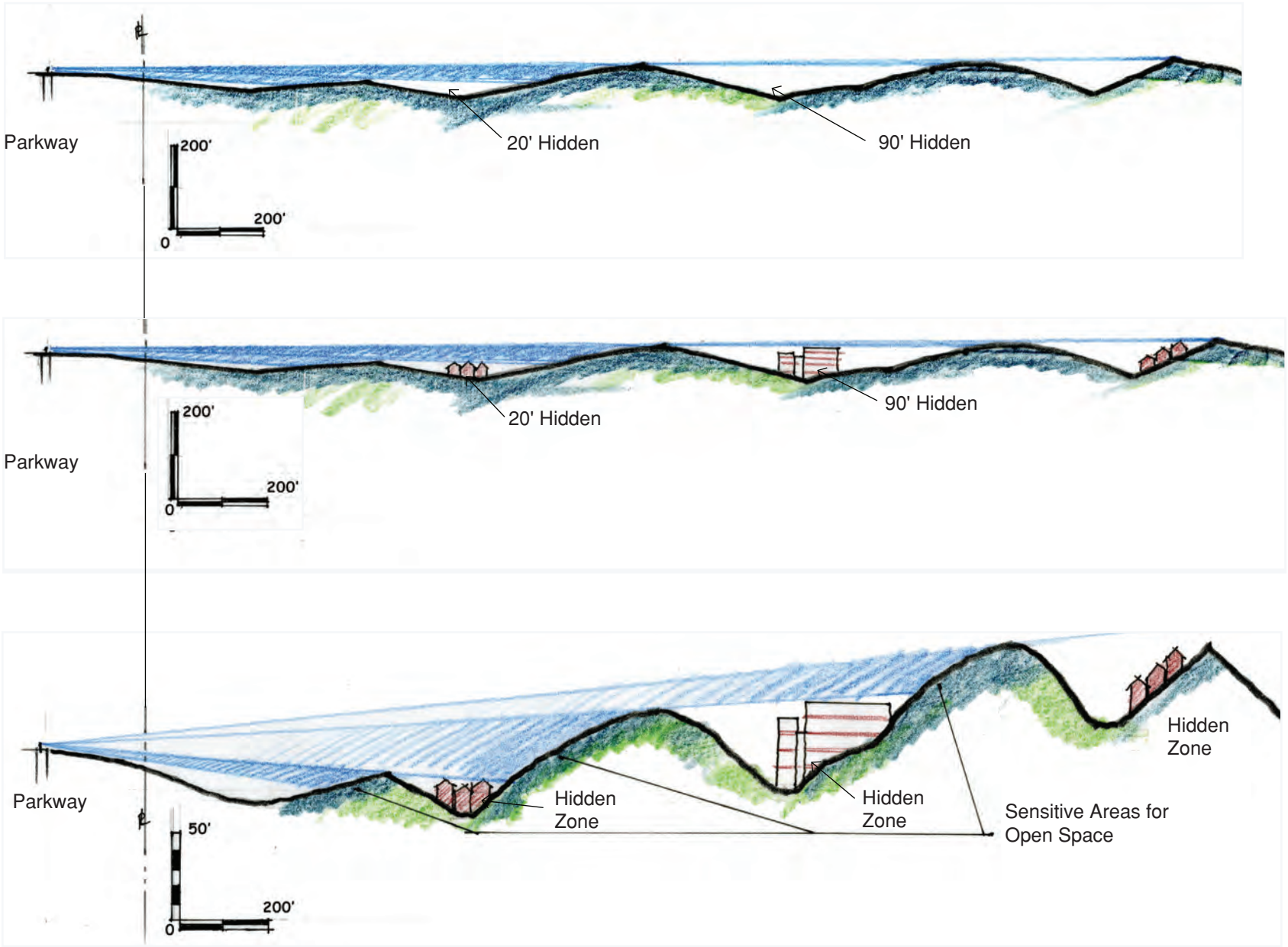
In addition to the Parkway's views, you should preserve and enhance the views from your own property. This can be accomplished by using your Site Amenities and Contributing Resources Maps to identify these views, and then using this information to preserve them during the development of the site plan.

For preservation of views, consider these additional tips:

- Locate structures to minimize negative visual impacts from the Parkway. Do not place structures in visually prominent locations; instead designate these areas as open space. Locate dense clusters of development in "Hidden Zones." (See sections, page 3.9)
- Maximize open space to preserve views.
- Protect focal, panoramic and framed views from Parkway to prominent scenic features.
- Do not allow structures or additions to obstruct views of the Parkway for adjacent property owners.
- Consider the future height of buildings, trees and shrubs so that neighboring views will not become obstructed.

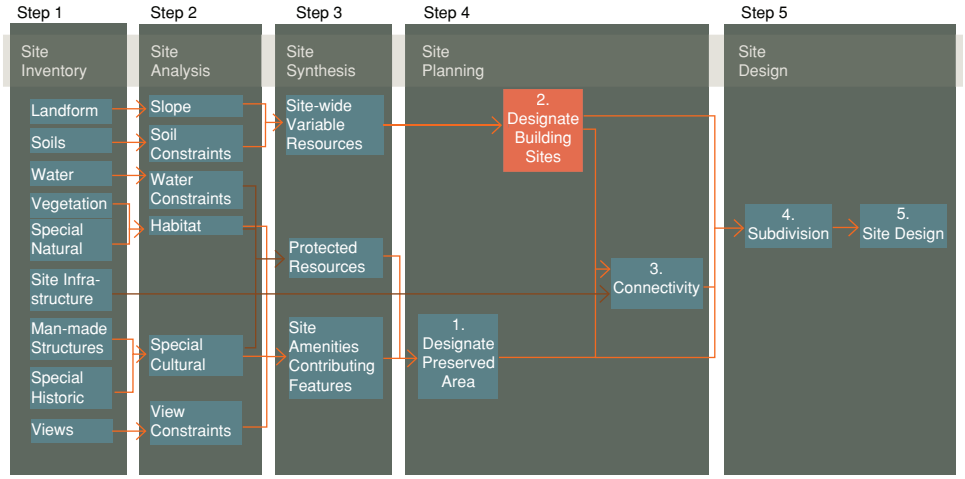
Houses in a conservation subdivision should be sited in a manner that respects neighboring houses and open spaces. In developing your property, choose sites that will allow houses to be spaced according to the desired density, while allowing maximum visibility to the green spaces and amenities promoted in the development. For example, a row of houses tucked into the woods, would provide great views from front rooms and porches, while preserving the edge of the woods and open fields.

In the sections to the right, the landforms create hidden areas, behind hills and in the valleys. Nearest the Parkway, a 20' hidden zone is depicted, where just the rooftops would be seen and then in the next valley, a 90' tall hidden zone is available.



Topography & Visibility: **Where to Hide Cluster Development**

Step Two: Designate the Building Sites



Building Site Selection

After designating the preserved open space, you can begin to determine the best location for buildings and roads within the development process. Use the Site-wide and Variable Resources Map (page 2.59) as a base for where you can place development. Note that the lighter-toned areas, show lands and site features that will have minimum impact if developed. These areas are prime candidates for new facilities and optimal for development.

When siting buildings, remember that the location within the landscape is important. Take advantage of your site's beauty and natural diversity by using your Site-wide Amenities and Contributing Features Map (page 2.57) to maximize your development's exposure and contribution to the landscape. The relationship of your development's new facilities to existing land use and development patterns is particularly important; look at other existing development in the landscape, such as building types, number, arrangement, and spacing. Pay attention to the surviving structures on your site; these can provide valuable lessons for traditional siting of new structures.

Farmhouse Seat

The location of the house in the landscape is one of the most important aspects of traditional farm design. In the traditional Blue Ridge agrarian landscape, the house was sited in a "house seat." The colloquial pre-World War I house seat was typically located in a valley, to protect it from winter wind and provide the occupants with water from a nearby springhouse. Depending on the local geography near the Parkway, there are topographic signatures for the traditional house seat. There are many variations, but traditional farms tend to follow patterns. We have named three general categories, including the saddle, upper reach and hillside, shown in siteplan sketches and photographs to the right. Since the Parkway is located on the crest of the Blue Ridge, the house is almost always located below the background ridge line. Ridges and trees surround the house, enclosing the house into the middle of the view, as opposed to the house piercing the skyline.

When siting your farmhouse, consider these three general siting models:

1. Saddle Farm - Imagine a house sited in a well-drained vale between two knobs. Outbuildings radiate from the house, oriented toward their respective fields or pastures. Traditionally, the family cemetery is on top of one of the knobs. Woods surround the background mountains.

2. Upper Reach - In this model, the house is sited in the valley, with radiating outbuildings, usually behind the house. The garden is usually in front of the house, or within a fenced compound with the house. The road from the valley, paralleling the stream as it climbs, dead-ends at an upper reach farm.

3. Hillside - In this model, the house, outbuildings, and garden are located on the same gradual slope. In many cases, a knob on the slope creates the house seat, and outbuildings radiate toward their respective fields. In these farms, the garden tends to be located below the house, but within view.

Saddle Farm



Upper Reach



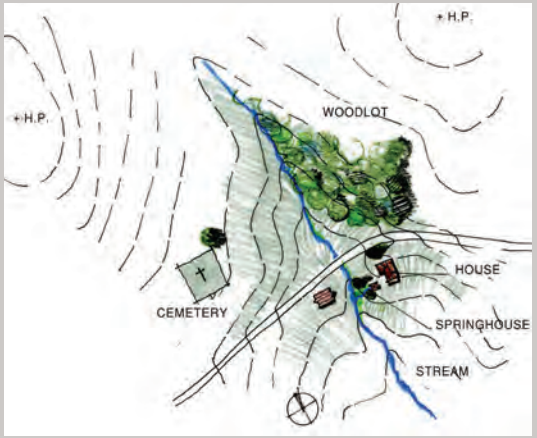
Hillside

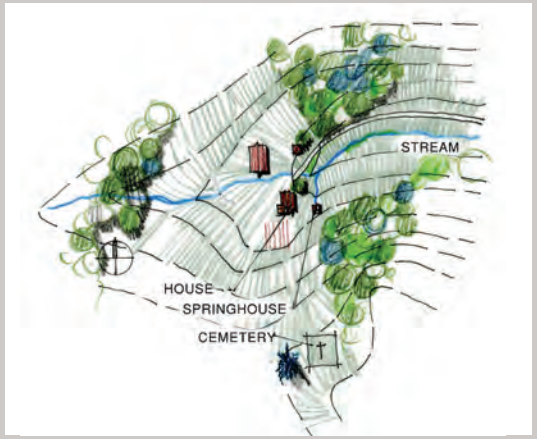


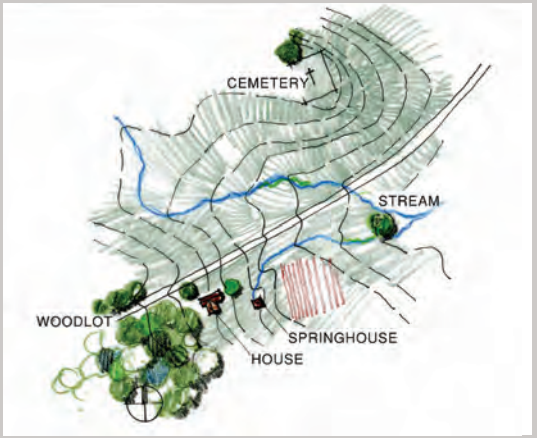










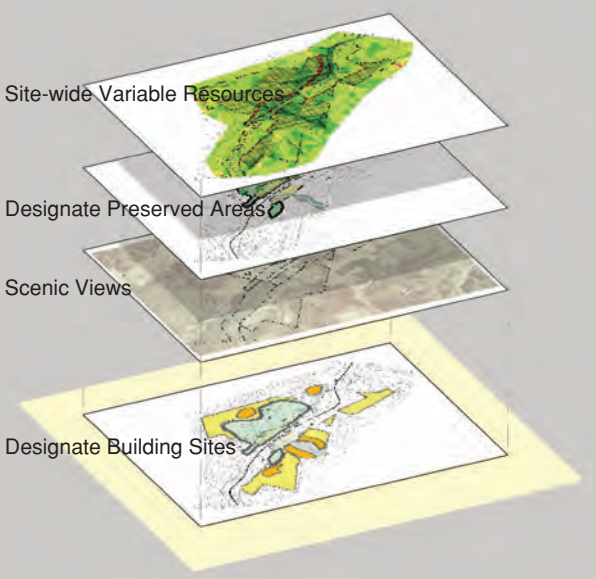


Look also at the Boundaries and Zoning Setbacks Maps. Some areas have specific requirements for building location. For example, **Scenic Easements** are prevalent on many parcels adjacent to the Parkway. Introduced in Chapter 2, the deed of a scenic easement is specific to the parcel. The Kelley School scenic easement addresses such things as agricultural land preservation and large trees to remain. The Parkway landscape architect can help determine which specific easement requirements may apply to your project.

Building Location

In locating your buildings, consider the following:

- Cluster new buildings near the base of a hill. The hill provides a backdrop to the buildings and helps retain open space on flat land. (See sketches on page 3.14)
- Plan for future buildings as part of your master plan. Integrate them into the site so that the buildings are not dominant. (See sketch on page 3.14)
- Use landscape components, such as vegetation and rocky outcrops, as natural features. Rural amenities and privacy can be created using setbacks from lot boundaries, streams, etc. (See sketch on page 3.14)
- Preserve ridgelines and hilltops. Avoid siting structures on them so that they are not silhouetted against these visually sensitive areas. Integrate construction on ridgelines and hilltops with the natural setting. Structures should be stepped with the hillsides; slopes or roofs should mirror slopes of the terrain. Buildings should be located to minimize grading and earthworks that adversely affect the character of the landscape. (See sketches on page 3.12).
- Minimize removal of trees and tree masses in order to maintain the forested silhouette at the horizon line.
- Keep rooflines of structures below the height of the existing tree canopy.

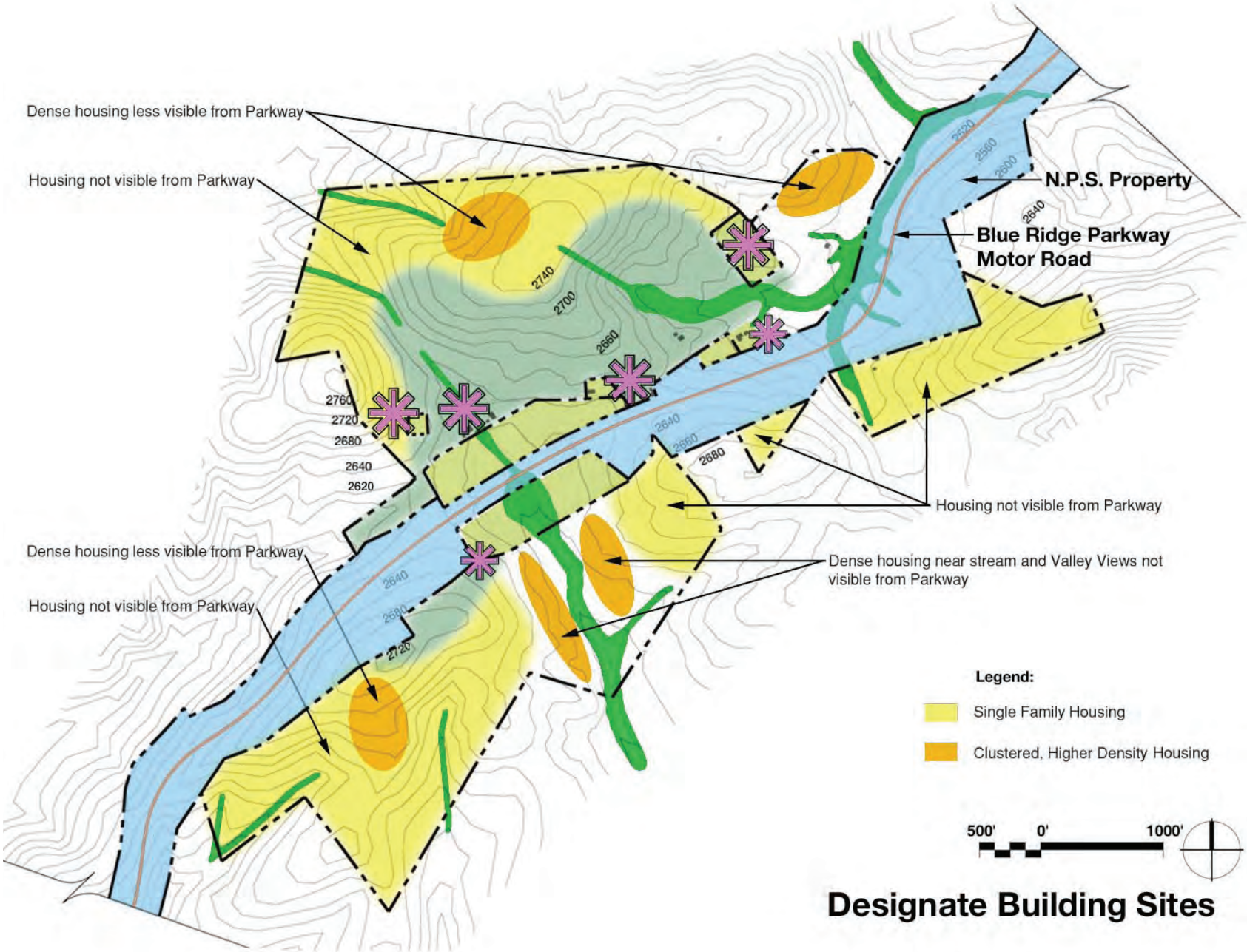


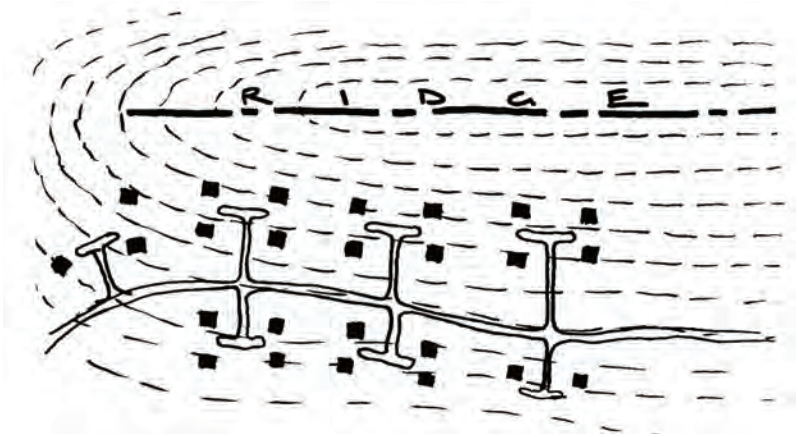


By clustering buildings near the base of the hill, the forest silhouette is preserved.



Siting buildings below the horizon lowers their visual impact, and fits them into the landscape.

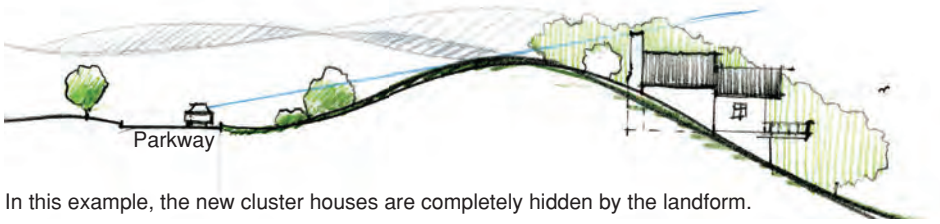

Dense housing less visible from Parkway
Housing not visible from Parkway
N.P.S. Property
Blue Ridge Parkway
Motor Road
2740
2700
2660
2760
2720
2680
2640
2620
2640
2660
2680
Housing not visible from Parkway
Dense housing less visible from Parkway
Housing not visible from Parkway
Dense housing near stream and Valley Views not visible from Parkway
2640
2680
2720
Legend:
Single Family Housing
Clustered, Higher Density Housing
500'
0'
1000'
Designate Building Sites



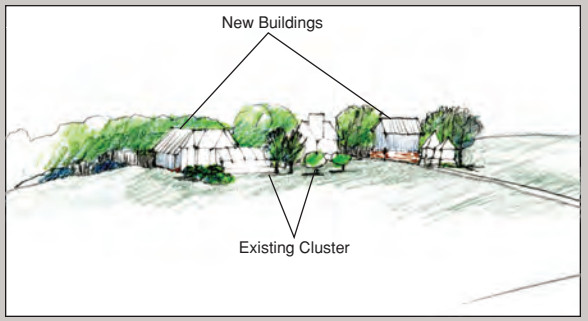
In this example, development is clustered at the base of a hill. The hill beyond serves as an amenity area and a natural backdrop.



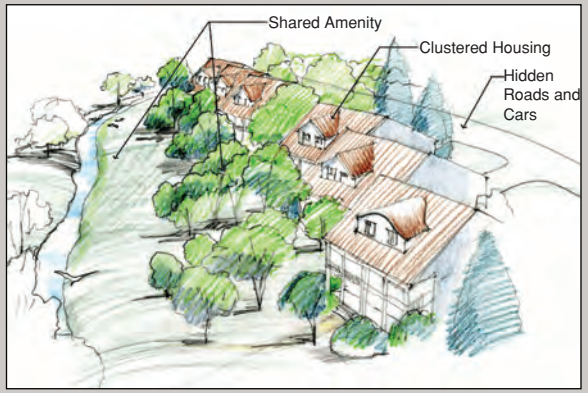
The resulting view from the Parkway (to the left) leaves the cluster development hardly seen.



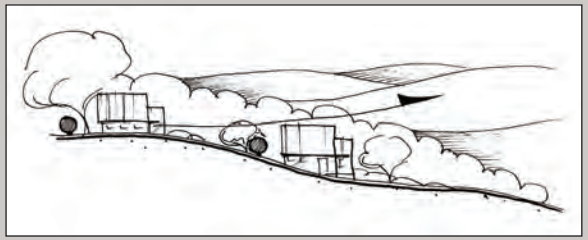
In this example, the new cluster houses are completely hidden by the landform.



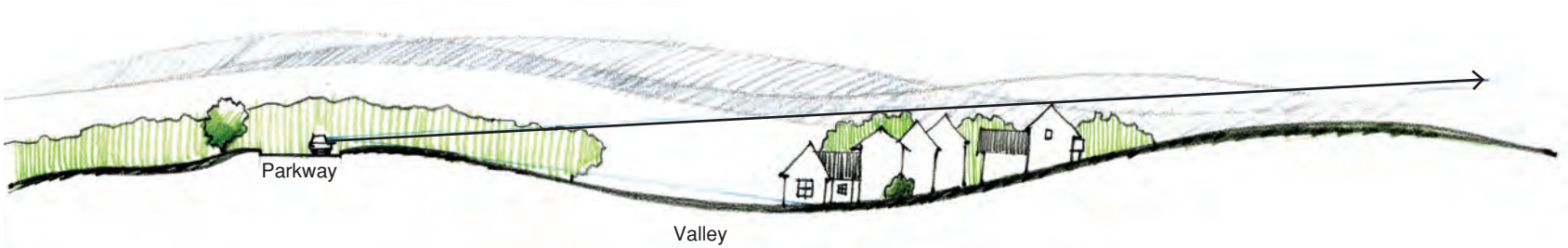
Study patterns from existing buildings to site new facilities.



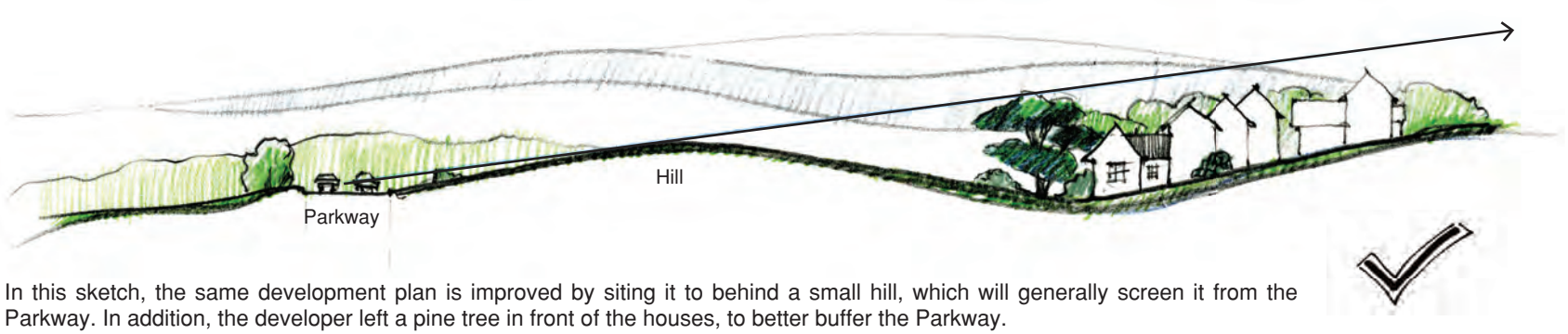
Cluster to share amenities. In this sketch, the existing stream and the streamside trees serve as a boundary and front yard area for new houses.



Site houses so every house has a good view.

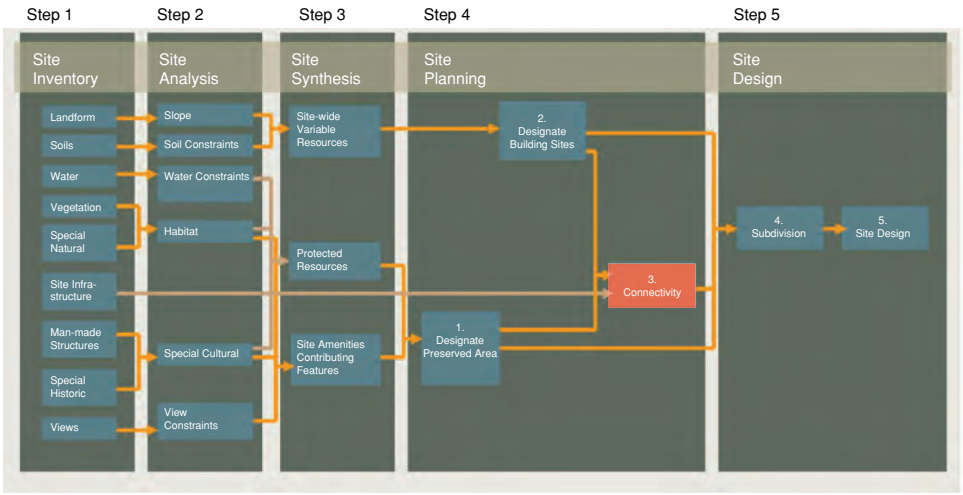


In this sketch, the development is clustered, and sited low in the valley, which are definite positives, but the cluster is sited within Parkway view and it will silhouette against the sky.



In this sketch, the same development plan is improved by siting it to behind a small hill, which will generally screen it from the Parkway. In addition, the developer left a pine tree in front of the houses, to better buffer the Parkway.

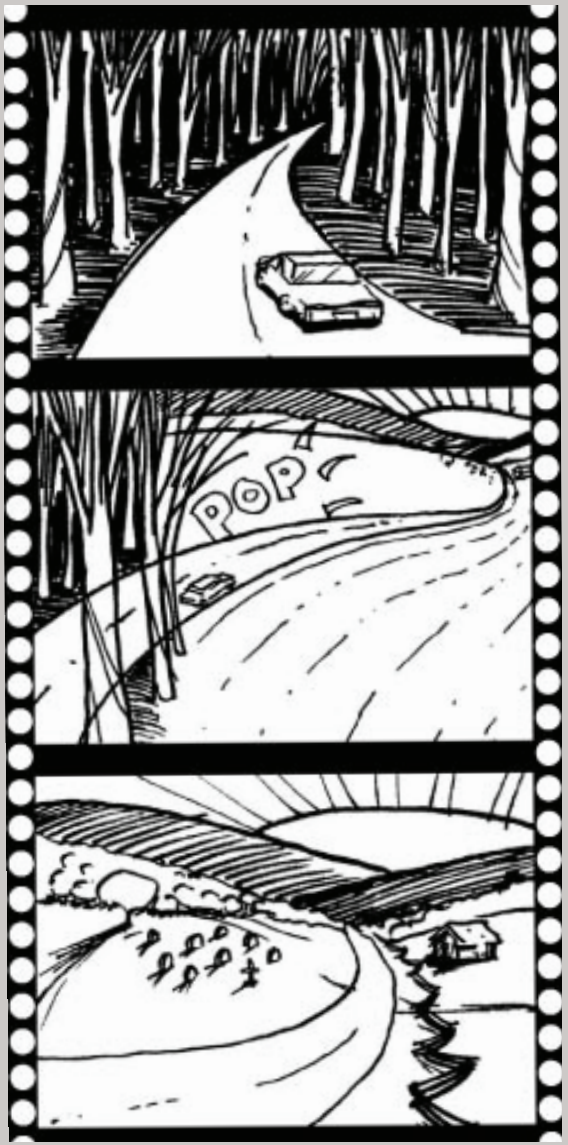
Step Three: Connectivity



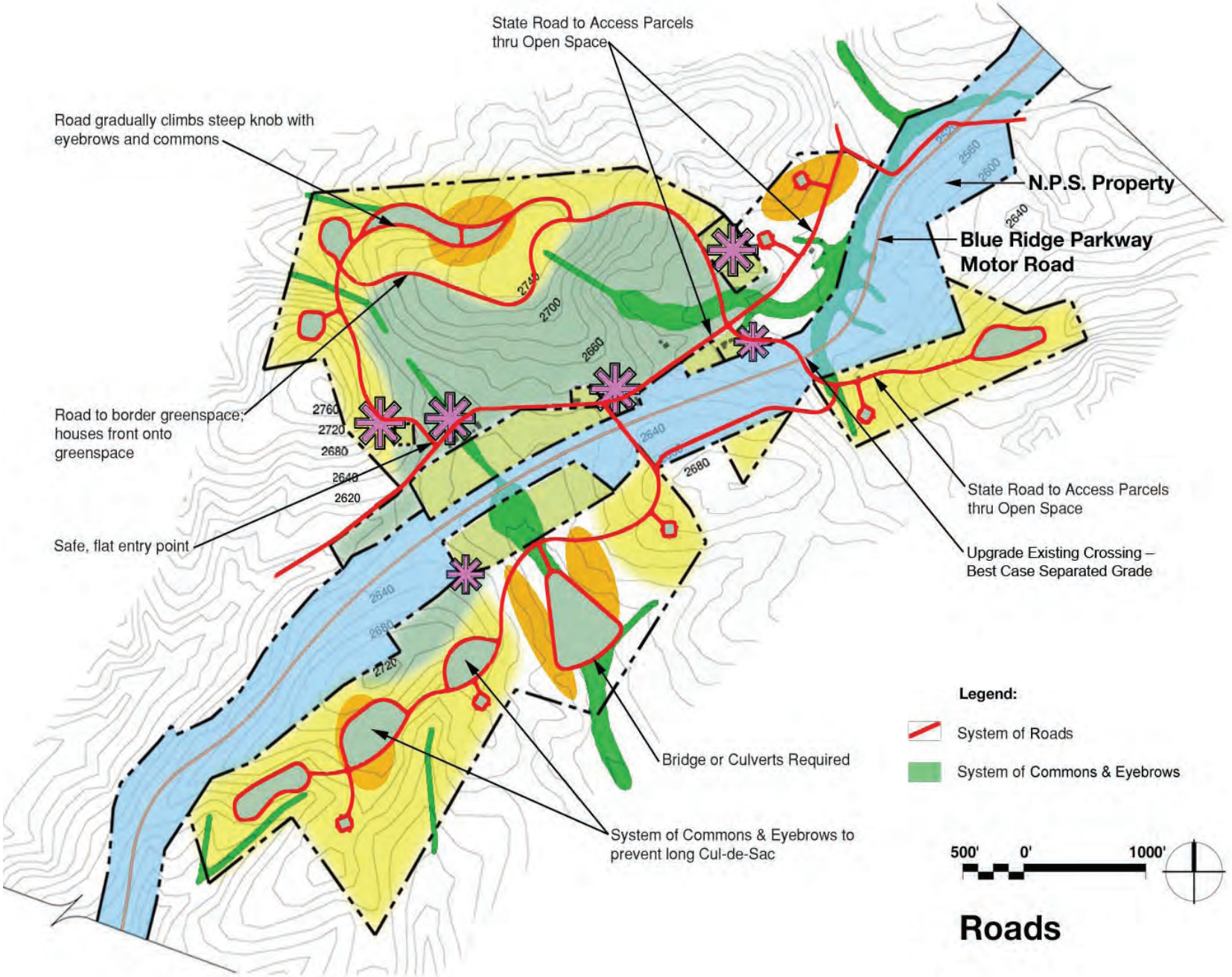
Once structures have been placed, "connect the dots" with roads, trails, and other desired access. In the spirit of the Blue Ridge Parkway, locate roads and trails to convey a cinematic experience to the visitor. Getting there can be half of the fun, if the sequence of experience is well thought-out in design and implementation. In the example, the entrance road traverses under woodland, then pops into an open field, before traveling along the edge of the meadow to the houses and finally the offices. Imagine the one-minute journey as if you were going through a movie. You are the director. "Places everyone. . .," you direct the experience!

Layout for Roads and Trails

With buildings sited, place a series of roads and trails to access these facilities. In general, the Slope map, Soils and the Habitat map will help guide the best places for roads and trails. Keep in mind that the Departments of Transportation will allow a public road to climb a steep rate for only a

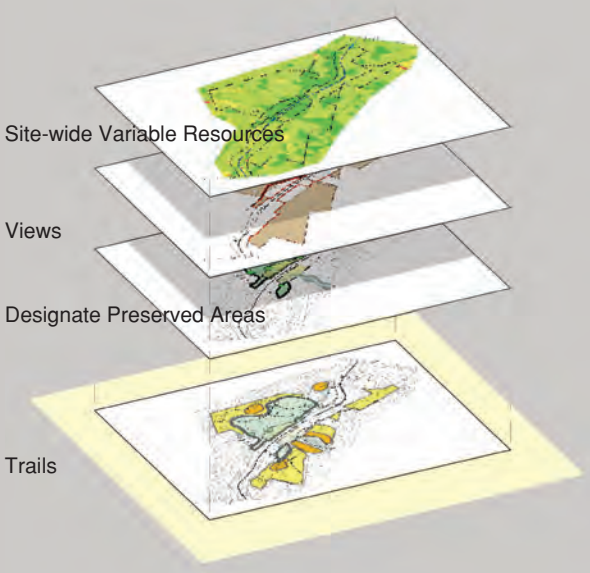


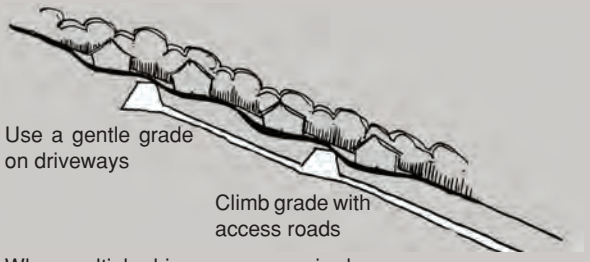
A cinematic experience was planned for the Parkway traveler. A series of events is planned in sequence, so the traveler experiences them just like going through a movie. Plan your roads for the experience.


State Road to Access Parcels thru Open Space
Road gradually climbs steep knob with eyebrows and commons
N.P.S. Property
Blue Ridge Parkway Motor Road
Road to border greenspace; houses front onto greenspace
Safe, flat entry point
State Road to Access Parcels thru Open Space
Upgrade Existing Crossing – Best Case Separated Grade
Bridge or Culverts Required
System of Commons & Eyebrows to prevent long Cul-de-Sac
Legend:
System of Roads
System of Commons & Eyebrows
500' 0' 1000'
Roads

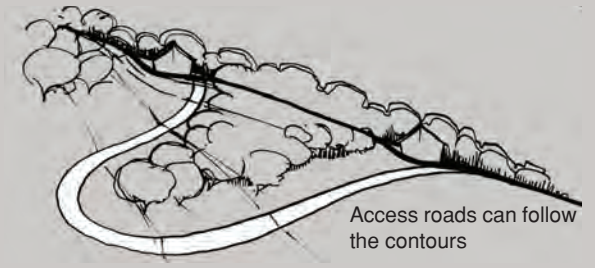
short distance in mountainous areas. Both North Carolina and Virginia have design guidelines for roads that are to be accepted into the State system. These will require specific standards for running slopes and side slopes, materials, widths, shoulder development and many other criteria. In site planning, careful attention to the guidelines below can result in a much better and less-costly system of roads:

- Accessways onto busy roads should be simplified and minimized. An existing access can sometimes be used when creating new lots.
- If you will need access through Parkway lands, you must first consult the Blue Ridge Parkway, to initiate the Environmental Assessment process.
- Gracefully curved access ways can minimize visual impact (see sketches, page 3.20) .
- Observe the existing farm roads on the property. These can sometimes serve as a guideline for improved roads.
- Careful location of roads on less steep slopes will minimize adverse effects in terms of erosion and maintenance. For general site planning, and where not superseded by more stringent local DOT regulations, 12% should be kept in mind as a guideline for steepest road slopes. 5% should serve as a guideline for steepest parking lot cross slopes, as well as for universally-accessible trails and walks.
- Avoid placing driveways on steep slopes that require awkward and unnatural grading. Design driveways that grade out gracefully with the natural slopes of the property. If frequent driveways are required, it may be best to have the main road climb the grade, and let the driveways be flat. If driveways are infrequent, then the road can climb along the contour (see sketches, page 3.18).

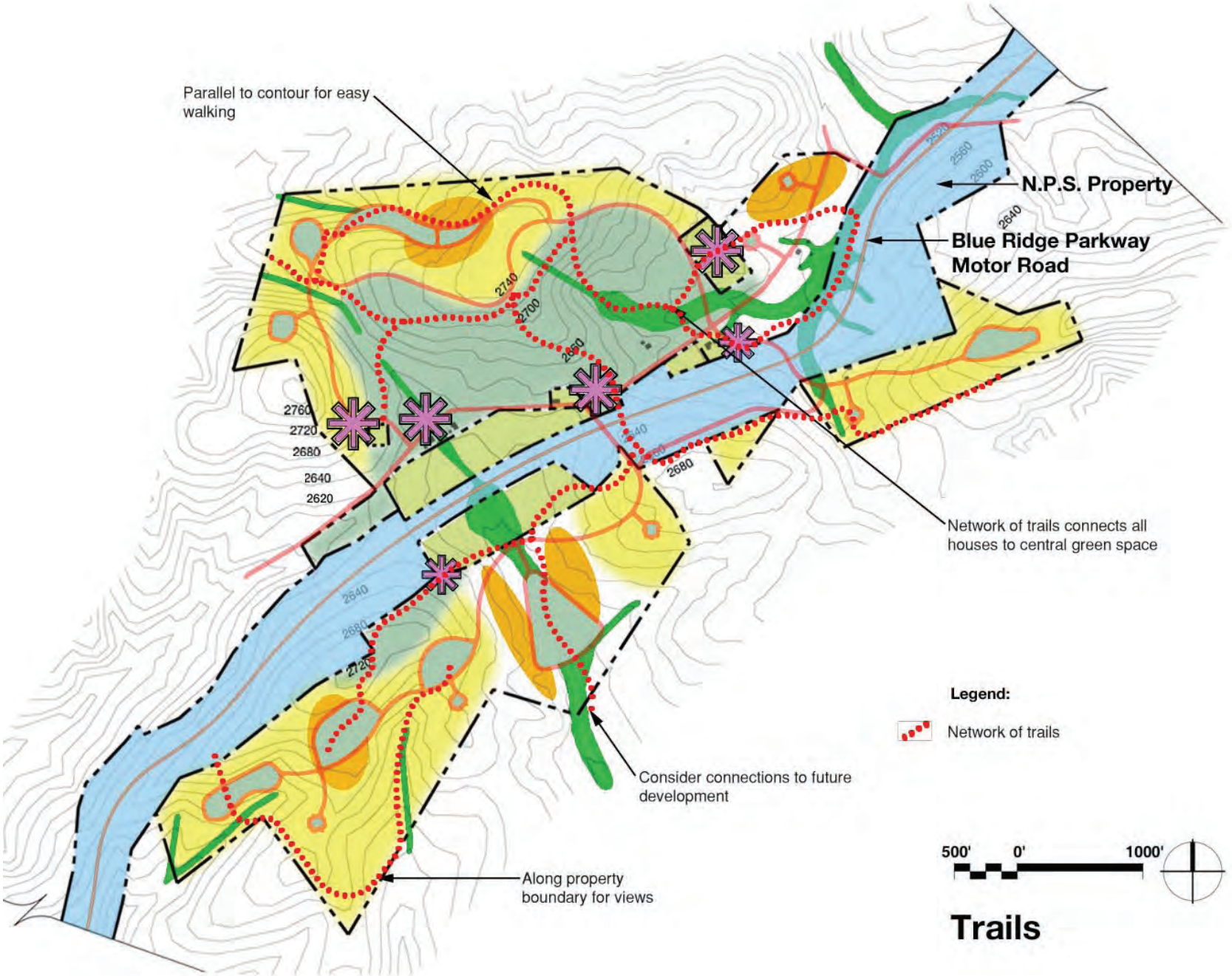




When multiple driveway are required.



When few driveways are required.

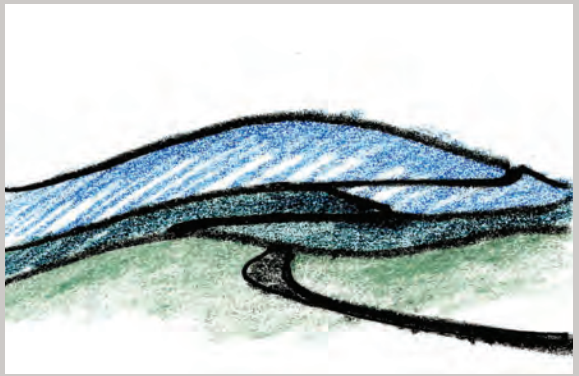

Parallel to contour for easy walking
N.P.S. Property
Blue Ridge Parkway Motor Road
Network of trails connects all houses to central green space
Consider connections to future development
Along property boundary for views
Legend:
Network of trails
500'
0'
1000'
Trails

- To blend with the native colors, roads, service roads and parking areas should be of dark colored gravel, bituminous or dark gray concrete. White or light colored concrete should be avoided.

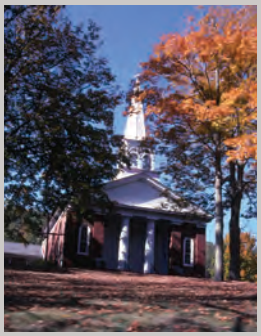
Trail guidelines follow the same general rules as roadways, with the exception that often the added purpose of a trail is to get people to an interesting resource, rather than trying to avoid it. Although universal access should be a goal of the trail designer, the Blue Ridge will present a challenge. So, try to minimize slopes, and construct trails of materials that are easy to traverse for people of all ability levels. You may want to include a variety of trail experiences, including some strenuous trail segments with difficult requirements for the most athletic participants.



Road alignment cuts through topography leaving big cuts and fills.



Road alignment along topography minimizing grading.



Steeple cellular tower.



Grain silo cellular tower. (Sollenberger Silos, LLC.)



Tree cell tower can be used in wooded areas. This one is near the Folk Art Center along the Parkway in Asheville (J. David Anderson.)

Utilities

It's not only the roads and paths that connect us, but we are connected through a number of utilities. Electricity, sewer, water, gas, cable, internet, telephone, and the list increases constantly. Generally, underground utilities are preferable to above-ground utilities. As counties have tried to accommodate an increasing number of underground and piped utilities, ordinances have been crafted for exclusive utility corridors, and this can be a surprise hindrance to the best-conceived plans. Visit with the local planner early in the process, to designate utility corridors as a proactive part of the design process, rather than having them appear as an afterthought to ruin a good plan. In many cases, roadways and trails can be co-located in the same corridor with some utilities. Get the rules at the outset. They vary from community to community.

- Infrastructure planning will often require technical assistance from qualified professionals to ensure the number of proposed lots can be sustained within the development. Low-visibility options, including underground utilities, should be explored.
- When establishing a utility district, water storage is an issue in many rural areas. The water tanks are one of the most visible and prominent utilitarian features on the landscape. Consider the locations of tanks to ensure they do not become a prominent view from the Blue Ridge Parkway.
- Cellular telephone towers are potentially visually prominent intrusions on the landscape. With a little imagination, they can be incorporated into the design of high buildings in developments. For example, they are hidden sometimes in church steeples or grain silos.

- Wind turbines are a new technology that may have substantial visual and environmental impact on the Parkway. Legislation is likely to follow the first edition of these guidelines. Consult the Blue Ridge Parkway landscape architects for your environmental responsibilities during the turbine scoping process.
- Distribution power lines and all new utilities crossing National Park Service land are required to be underground, within a road shoulder. All utilities that cross NPS land require special permits, with fees assessed annually.
- Power, telephone, and data cables can be provided both by underground and by overhead lines. Underground supply has less visual impact and reduces the perception of people living in the rural landscape.
- Sometimes underground power on your land is not feasible. In these instances, a more insulated cable, locally known as “tree cable” can be used. It costs a bit more than ordinary power cable, but trees can grow around it much more closely than the regular cable. The result is the absence of a straight clear swaths through the woods to accommodate cable.
- Another way to avoid the straight cleared swaths of power lines, is for the homeowners association to take over the maintenance of the rights-of-way through the property, according to Power Company guidelines. This is a win-win for the power company, who must pay for maintenance otherwise, and the land owner, who can benefit from a more personally and carefully attended corridor.
- Septic field laterals can be considered in some common areas, when designed by professionals for this purpose.
- When considering stormwater disposal make sure natural water-courses will not be adversely affected by changes to existing drainage patterns and overland water flow. Consider potential effects on neighboring properties.

Utility Corridors

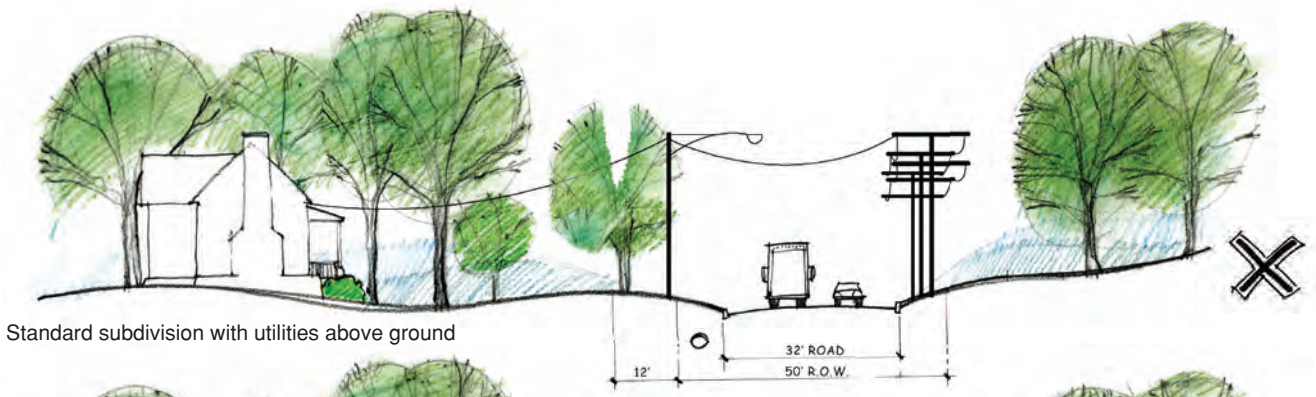
To the right, the top sketch indicates the normal condition of utilities within subdivisions, and some of the visual clutter that happens. The sewer and water are shown in underground corridors parallel to the roadway. Squeezed within these corridors are aerial power lines. Frequently, power, telephone, and cable services share poles. Because trees grow around these poles in rural areas, the branches are lopped, disfiguring the trees.

Shown in the center sketch, as a response to the clutter of aerial utilities, some newer developments feature underground utilities. The number of linear utilities requiring independent corridors has had the unintended effect of immense clear corridors where trees are not allowed to be planted.

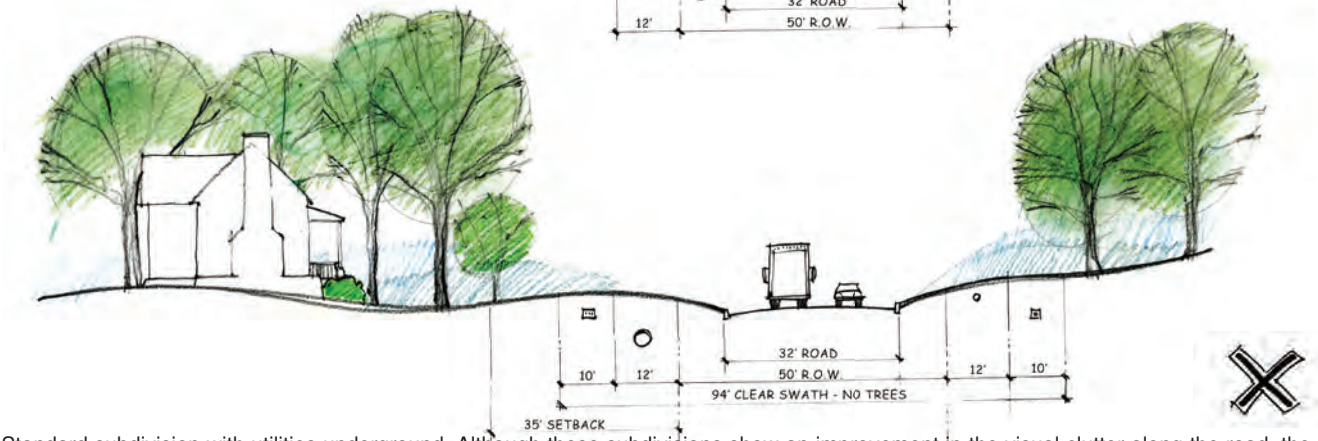
Shown in the bottom sketch, the creation of cluster subdivisions with alleys provides two systems for utility location. Some of the utilities can be placed under alleys, freeing the street corridor to have canopy trees that define a pleasant highland neighborhood.



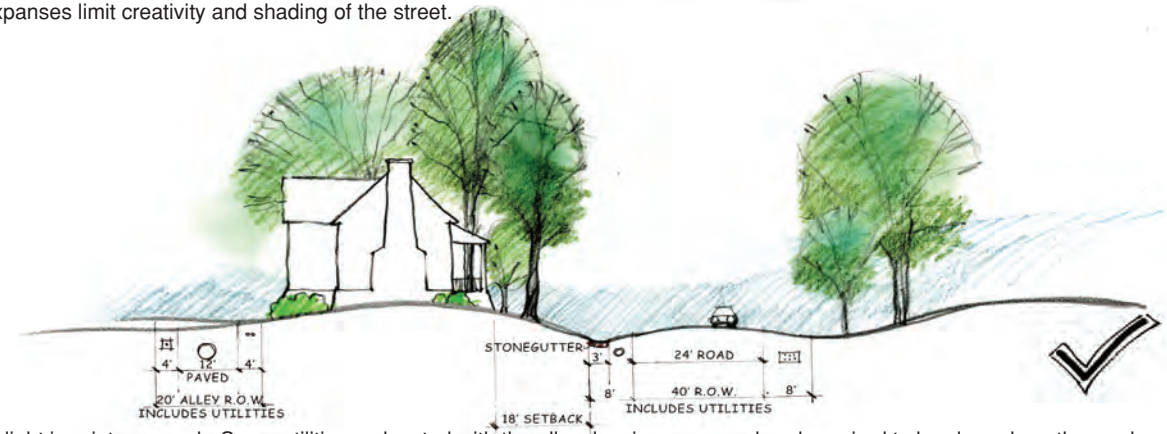
Some power companies use "tree cable" in special-request areas. Tree cable costs more to install, but tree limbs can grow very close to the electrified lines.



Standard subdivision with utilities above ground

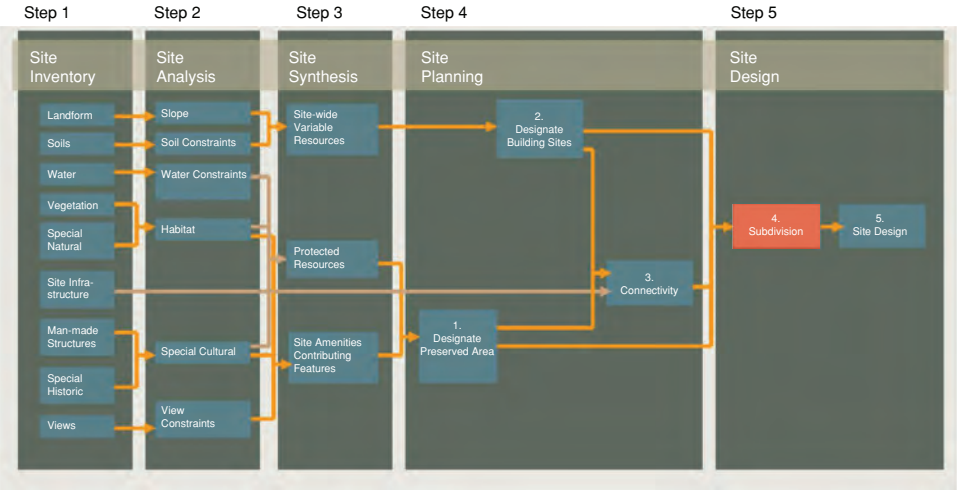


Standard subdivision with utilities underground. Although these subdivisions show an improvement in the visual clutter along the road, the tree-less front expanses limit creativity and shading of the street.



Dispersed utility light imprint approach. Some utilities co-located with the alley, leaving a narrow band required to be clear along the roadway.

Step Four: Subdivision



Last but not least, divide the land into saleable parcels. Keep in mind the local subdivision ordinance for setbacks as well as lot size dimensions and shape requirements. While drawing the lot lines, also consider the land that is to be set aside for public or semi-public use.

In a conservation subdivision, much of the land can go into a public trust, saving it from individual taxation at a residential rate, saving on your residents' real estate taxes. This land may be conveyed to a homeowner's association (HOA) or some other semi-public body. While trying to be generous with the land donation, remember not to give the receiving group more than it can handle. Long-term maintenance will be a concern for these low-overhead operations.

Currently, there are significant tax benefits for donations of conservation easements. As a general guideline, 50 acres of contiguous land is a minimum size for some land trusts to be interested, but if there is a special resource

Land Trusts

The number of potential partners for finding a conservation easement donation has flourished over the last decade. Each state has different rules, which can change as the practice is perfected. Contact the executive director at your local land trust, for clear explanations of terms and responsibilities.

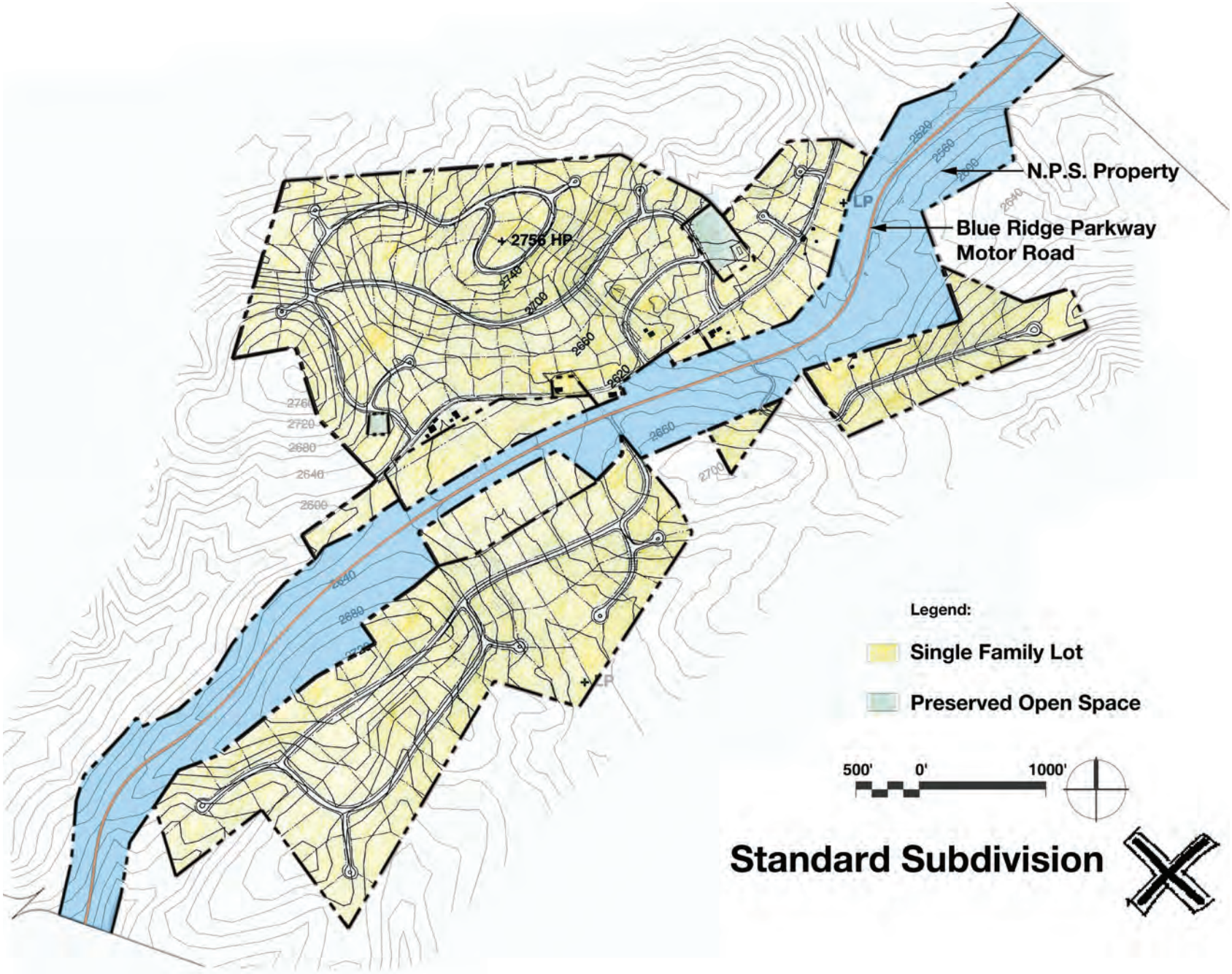
Some national land trust agencies for information:

- American Farmland Trust
- www.farmland.org
- Appalachian Trail Conservancy
  http://appalachiantrail.org
- Conservation Fund
  www.conservationfund.org
- Land Trust Alliance www.lta.org
- Trust for Public Land www.tpl.org
- National Committee for the New River
  www.ncnr.org

In North Carolina, to find your local trust, refer to:
http://www.ctnc.org/ltmap.htm

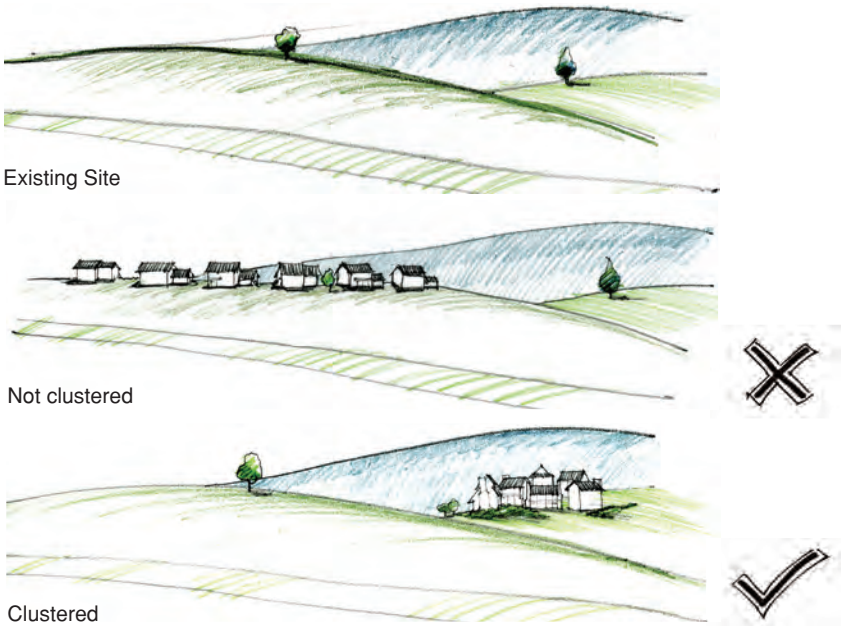
Local land trusts in North Carolina:

- Blue Ridge Rural Land Trust
  www.brrlt.org
  Conservation Trust for North Carolina
  www.ctnc.org
- High Country Conservancy
  www.highcountryconservancy.org
- Foothills Conservancy of North Carolina
  www.foothillsconservancy.org
- Southern Appalachian Highlands Conservancy
  www.appalachian.org
- Carolina Mountain Land Conservancy
  www.carolinamountain.org


N.P.S. Property
Blue Ridge Parkway
Motor Road
+ 2756 HP
Legend:
Single Family Lot
Preserved Open Space
500' 0' 1000'
Standard Subdivision

like a special view from the Parkway (or some other special resource found through the site analysis process) then smaller size easements could constitute a very valuable gift. Additionally, when subdividing, consider:

- Smaller lot sizes clustered together help to retain rural open space.
- Clustering of lots and buildings allows for enhancement of the surrounding natural and agricultural landscape character, by leaving more space open for this purpose.
- Avoid locating lots in swales, gulleys, and other water collection areas. These can be ecologically enhanced as part of a subdivision adding character and value.
- Vary lot sizes to accommodate landforms, contours and variable market requirements.

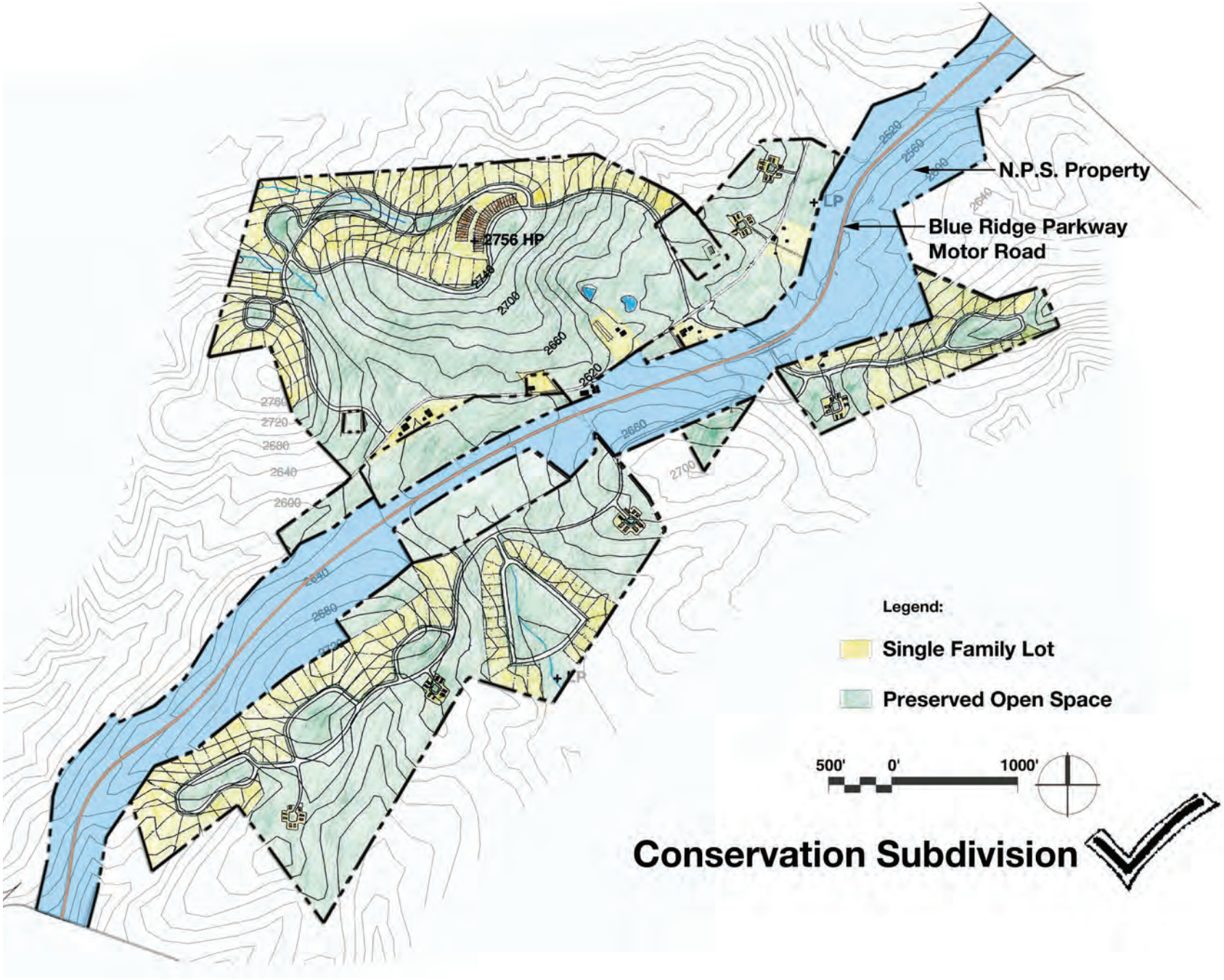


In Virginia, the state coordinator of land trusts:

- Land Trust of Virginia
  www.landtrustva.org/index.htm
- Virginia Outdoors Foundation
  www.virginiaoutdoorsfoundation.org

Some local land trusts in Virginia:

- Valley Conservation Council
  www.valleyconservation.org
- Western Virginia Land Trust
  www.westernvirginialandtrust.org
- New River Land Trust
  www.landtrust.org


N.P.S. Property
Blue Ridge Parkway
Motor Road
2756 HP
LP
Legend:
Single Family Lot
Preserved Open Space
500'
0'
1000'
Conservation Subdivision

Standard Subdivision vs. Conservation Subdivision

A comparison of site plans is illustrated on pages 3-27 through 3-29. On these pages, the Kelley School site is illustrated first as a standard subdivision, and then as a conservation subdivision, employing the research of chapters 2 and 3. Although it meets legal requirements, the standard subdivision is definitely uninspired. It scatters houses all over the landscape, without regard to the resources of the property or the Parkway. AS the subdivision fills, its residents will be disappointed their views and experience of the spectacular Blue Ridge scenery will be replaces by views of each others houses.

In contrast the conservation subdivision reaches to extraordinary limits to preserve views from the Parkway, and locate scenic clusters of houses within pastures, while buffering streams, providing its residents the very resource that they came to experience.

It may come as a surprise that the conservation subdivision also can provide a better return for its developer, through lower infrastructure costs, and higher home prices, made even more desirable by the tax credits available for conservation of land. Assuming that land costs, utilities, surveying and engineering and other costs are equal, or based on a percentage of hard costs, there is remarkable difference in the cash flow of the two subdivisions, shown in the bottom line. Good design and land conservation pays handsomely.

Although it is not impossible for a novice to develop a good plan, a key to creating a good conservation subdivision is commissioning an inspired landscape architect or land planner who understands the Blue Ridge Parkway, and resource-based land planning. This investment will pay itself back, many times over. There are many firms in the Blue Ridge capable of producing inspired and profitable plans.

In addition to the local phone book, and the advice from the planning staff in your county, you can consult the American Society of Landscape Architects (ASLA) "Firm Finder" website (http://www.asla.org/ISGWeb.aspx?loadURL=firfin) to search for firms accomplished in master-planned communities, as well as many other specialties.

Standard Subdivision vs. Conservation Subdivision

Plan Data (pgs. 3.25 & 3.27)	Standard Subdivision	Conservation Subdivision	Conservation Advantage
Total Acres	340	340	
# of Homes	210	251	120%
2-Lane Roads (l.f.)	25520	15950	63%
1 -Lane Roads (l.f.)	0	7260	
Conservation Acres	40	175	438%
Costs			
Land Costs	$2,380,000	$2,380,000	
Landscape Architect's Master Plan	$0	$100,000	
Land Conservation Plan	$0	$100,000	
2-Lane Road costs ($150/l.f.)	$3,828,000	$2,392,500	
1-Lane Road costs ($120/l.f.)	$0	$871,200	
Misc Hard Costs @$1,000/lot	$210,000	$251,000	
Soft Costs @ 25% Hard Costs	$1,604,500	$1,523,675	
Project Costs	$8,022,500	$7,618,375	95%
Returns			
Average Lot Price	$40,000	$50,000	125%
Lot Sales	$8,400,000	$12,550,000	149%
Sales Price / Developed Acre	$30,882	$76,061	246%
Profit	$377,500	$4,931,625	1306%

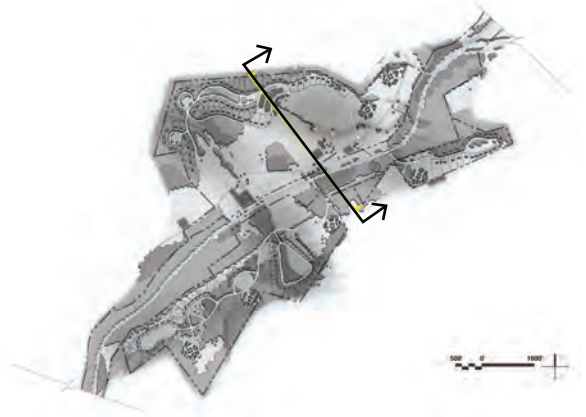
A Neighborly Subdivision

The subdivision shown on these pages is the result of the process described in Chapter 2 and Chapter 3. Surpassing the densities allowed in by-right zoning, this development places over ½ of the land into public open space, including a generous easement donation in the large fields. This development preserves all of the features as marketable amenities, linking them with trails. The development achieves all of this while having minimal visual impact on the Parkway, preserving the views for generations to come.

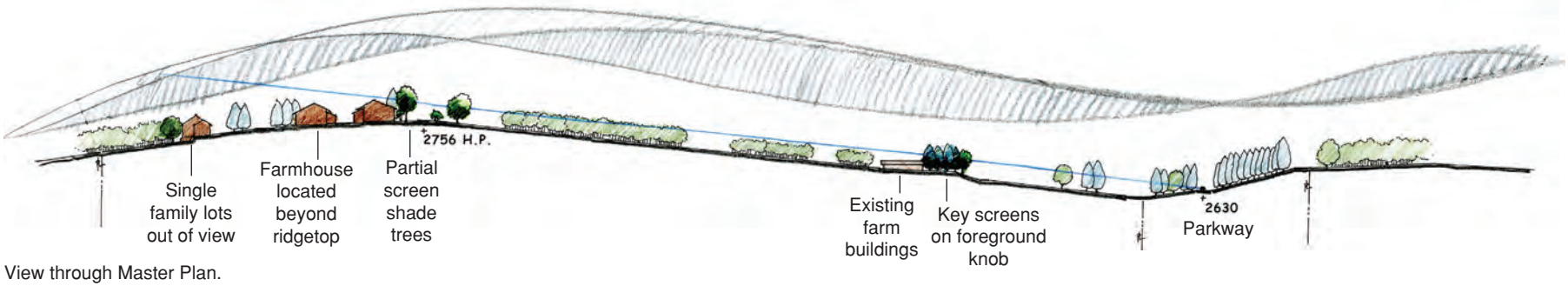
Most of the housing is placed in dense clusters. Although there are 60 single-family lots, the way that the design achieves real land preservation is through creation of 30 townhouses, 72 hamlets (see sketch, page 3-32), and 97 common and eyebrow lots. Having more in common with the way man has settled over the last millennia than the last 50 years, these four land-saving techniques place houses in dense arrangements of the most developable land, providing access to the large open green spaces nearby. By arranging development this way you achieve a sense of community, walkability of the neighborhood, economy of infrastructure, and most importantly, preservation of the rural countryside. Shown on the aerial photo on page 3.33, the plan fits within the agricultural and forested patchwork of the regional landscape.



Clustered settlement pattern.



Master plan section cut.



View through Master Plan.



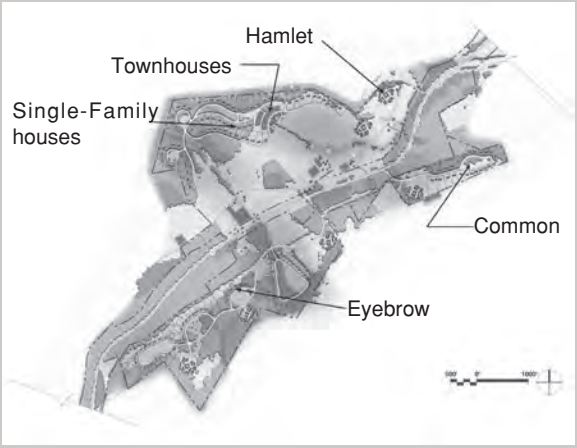
Subdivision Master Plan



Hamlet plan.



Hamlet elevation.



Subdivision Definitions

Common Lot - a small parcel, sited around a common green space. Modeled on a New England village form, the common is across the road from each lot. Lots average about 6,000 s.f.

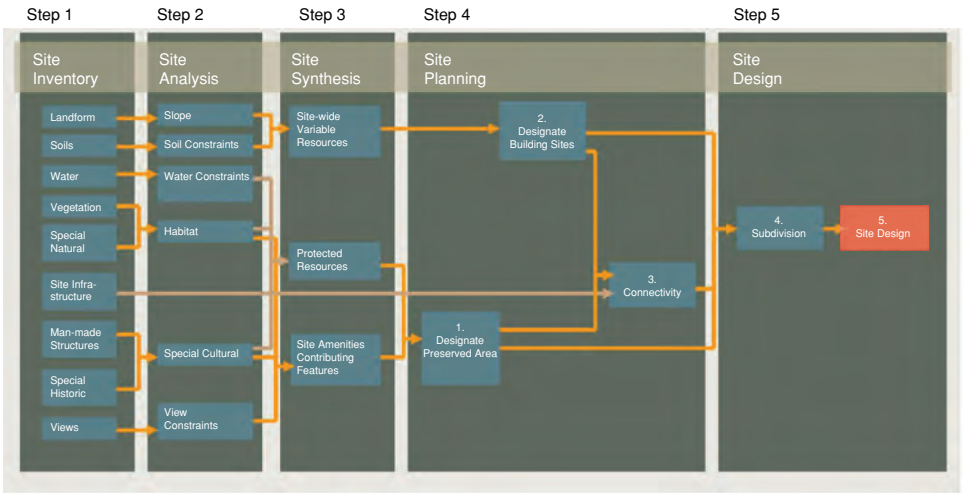
Eyebrow - A three-sided Common, with small lots surrounding. The heavier traffic bypasses the eyebrow on the distant side.

Townhouses - Denser-built houses with shared walls on the sides. Townhouse density approaches 20 per acre, with an open view of the 100 + acre field from the units.

Hamlet - a cluster of 8-12 homes on about 2 acres, located on knolls overlooking open fields. Hamlets in the example subdivision are surrounded by working countryside, fields, and woods.


Variety of Lot Sizes
Rustic Townhomes
Community Green
Preserved
Stream Buffer
Community Green
Parkway Viewshed
Preservation Area
NPS Property
Blue Ridge Parkway
Motor Road
Blue Ridge Parkway
Parkway Viewshed
Preservation Area
Community Green
Parkway Viewshed
Preservation Area
Parkway Viewshed
Preservation Area
Preserved
Open Space
Preserved
Stream Buffer
Community Green
Community
Woods
Preserved
Open Space
Community Green
500' 0' 1000'
Area Context:
Subdivision Master Plan

Step Five: Site Design



The site design process generates a series of construction-oriented plans, showing the proposed improvements upon the existing features. By delineating variables such as demolition, grading, layout, and new structures on design plans, designers attempt to place the development program onto the original landscape.

Earthwork, Grading and Landform Enhancement

Site designers and contractors define earthwork as moving earth, including rock, soil, and debris, from one place to another. Part of earthwork, **grading**, means moving soil or rock to accommodate proposed structures, temporary staging areas for construction, driveways, utilities, terraces, and other new land forms. Moving earth may have long term and permanent implications for your development, as well as the adjacent properties, and the general ecological health of the landscape. Considerations with grading:

Grading Options



Severe - simplest at the outset, but hardest to maintain.

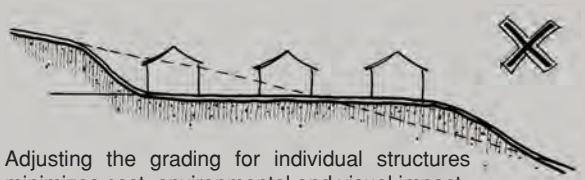


Terraced - visually stimulating, but not a tradition in the Blue Ridge.



Natural - the local tradition, which minimizes visual impact, and is easier to maintain.

Minimize Grading



Adjusting the grading for individual structures minimizes cost, environmental and visual impact.

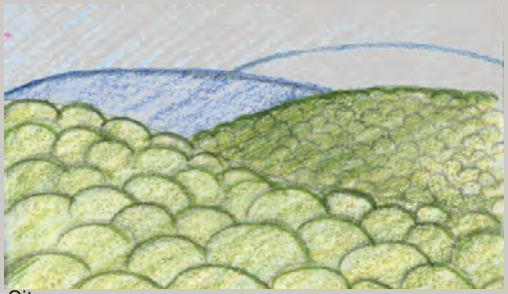




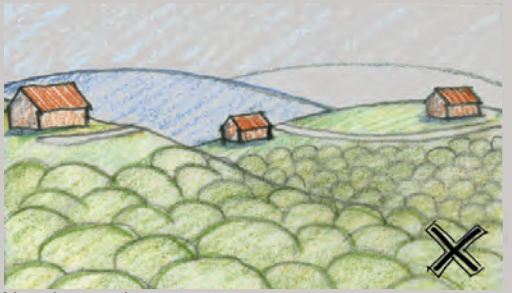
Uniform subdivisions can obliterate landscape character.



Vary and adjust your parcel size to fit the resources in the landscape.



Site.



Not clustered.



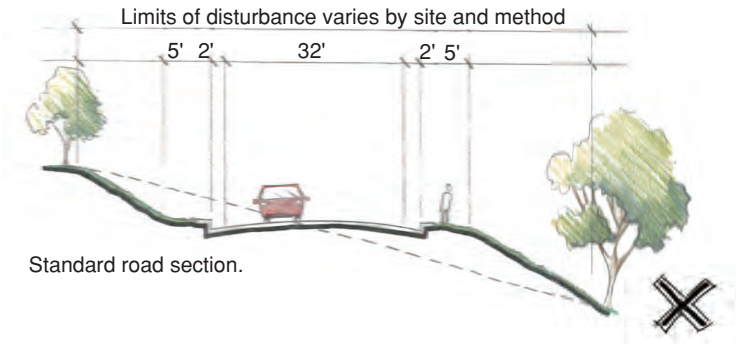
Clustered.

- Sediment and soil run-off associated with earthwork affects water quality and can damage neighboring properties.
- Grading can increase land instability and the potential for flooding.
- Performing earthwork has the potential to temporarily adversely affect amenity values by creating noise and dust emissions. Plan your work to minimize these nuisances on neighbors.
- Grading can disturb cultural and heritage sites, including archaeological sites.

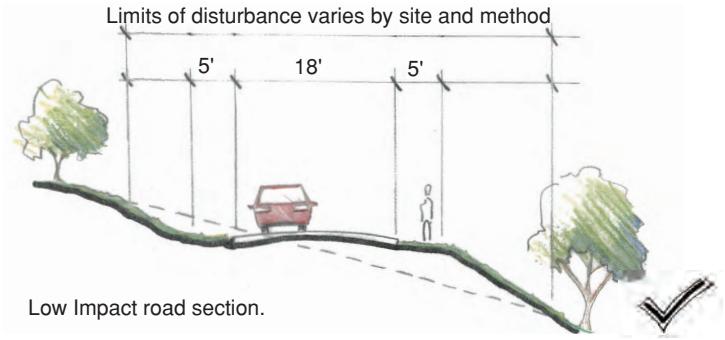
Potential adverse effects resulting from earthwork can be avoided if the natural landform is carefully considered as part of the plan. Decisions about where to locate development need to consider and minimize the amount of grading and ground disturbance required. Using the Blue Ridge Parkway as an example, manipulating landforms and contours responds to the desire to make the finished product appear as if grading never occurred. A healthy landscape shows no signs of erosion, or sharp angles where existing and proposed contours meet. In dealing with landform and contour, apply these rules:

- Look at the existing roads, agricultural, vegetation, drainage and urban patterns in the broader landscape. Note the transition patterns, and emulate successful transitions.
- On flat sites, straight roads and rectangular lot layouts are compatible. On a rolling or steep site, uniform subdivision layout can obliterate landform character on a rolling or sloped site. On steep sites, make the subdivision fit the land. Vary and adjust parcel sizes to fit the landform.

- Roads that curve with the landform and avoid hilltops provide a good landscape fit. Straight roads visually disrupt the landscape on rolling or sloped land.
- Avoid changing the significant natural landforms. Contour the site to harmonize with the surrounding natural landforms.
- Consider clustering new buildings within the contours of the land, avoiding ridge tops and exposed slopes. Use the existing landforms and vegetation as a backdrop for new buildings.
- Utilize natural landforms and existing vegetation to screen new buildings from Parkway view.

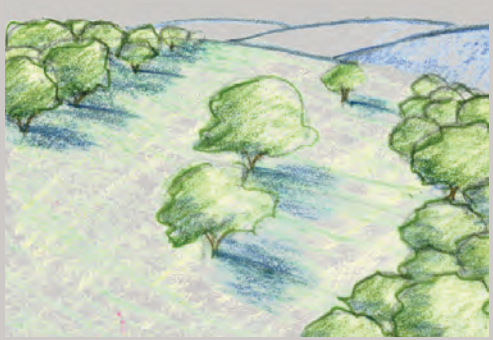


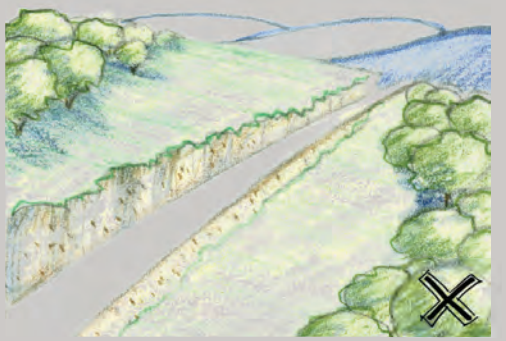
Standard road section.

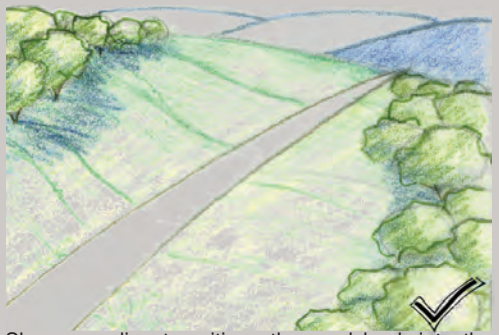


Low Impact road section.

Road Grading

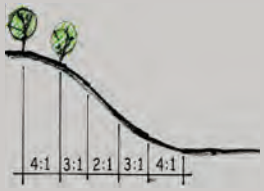

Existing site.


Above, slope rounding was not implemented. Steep cuts and fills erode at the top of the slope. Slope lines are clearly visible.

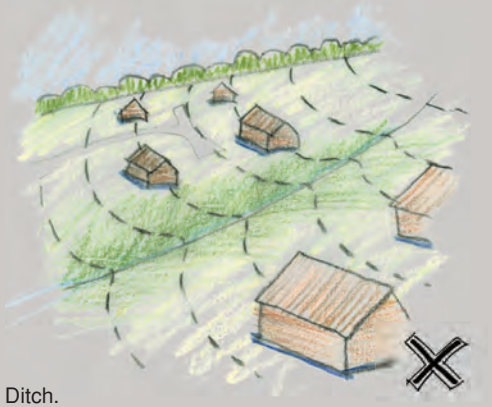

Slope rounding transitions the road back into the natural scenery. The top of cut and toe of fill are invisible.



Non-rounded transition slope.



Rounded slopes are more natural and more easily revegetated.



Ditch.



With plantings and some creative grading, an ordinary straight ditch can become a "Dry Run."

- Organize cooperative approaches between neighbors to develop practical approaches to site drainage. Avoid the tendency to put a straight ditch at the property line.
- Respect natural drainage ways. Reshape disturbed swales and drainage channels so that they look and function naturally. Use good engineering practices, but avoid the straight, man-made ditch look.
- Use contour grading to blend into landforms rather than severe cutting, filling, padding or terracing. As part of grading, design retaining walls as terraced or occasional elements, not large single retaining walls.
- Control grading and site preparation to reduce erosion and soil exposure and minimize impacts on natural drainage systems.
- As soon as possible, re-vegetate cuts, fills, and other earth modification with appropriate native plantings.

Streams, Retention and Drainage Facilities

In a large part, the Blue Ridge Parkway is located at or near the top of the watershed, and in some cases, it is perched at the Eastern Continental Divide. The adjacent lands share this topographic distinction. From a regional perspective, they are lucky to receive rainwater first before it runs through other properties. With this distinction comes the responsibility to make sure that water maintains its highest quality as it passes through to other properties. The drainage patterns of the Blue Ridge are rich in streams and highland wetlands.

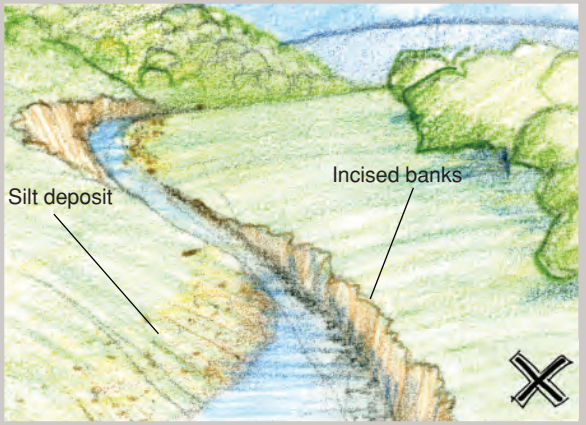
In addition, many less developed drainage features including swales, gullies and ditches may cross the land. If there are streams or other drainage features on or adjacent to your property, you should consult the local building inspection office for policies related to sensitive habitats, riparian corridors and wetlands to determine if these policies apply.

- All streams and natural drainage features should be avoided when deciding where structures should be placed to protect them from the erosion, siltation and polluted run-off that can occur.

- Man-made drainage features may be covered or relocated, provided that sensitive habitats are not disturbed and a design professional or responsible land disturber is performing the modifications.

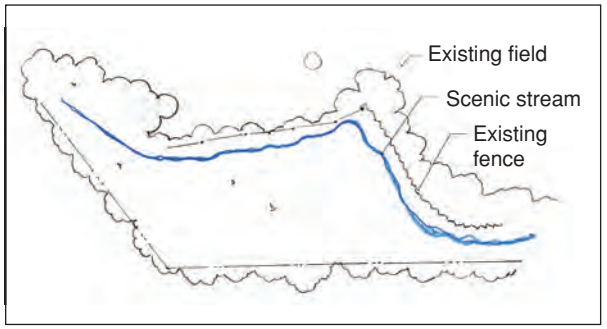
- Stormwater from buildings should take advantage of the opportunity to improve local storm drainage systems and protect streams and drainage features from erosion, siltation, and polluted run-off by improving water retention and movement on site, by employing low impact development (LID) methods. http://www.lid-stormwater.net

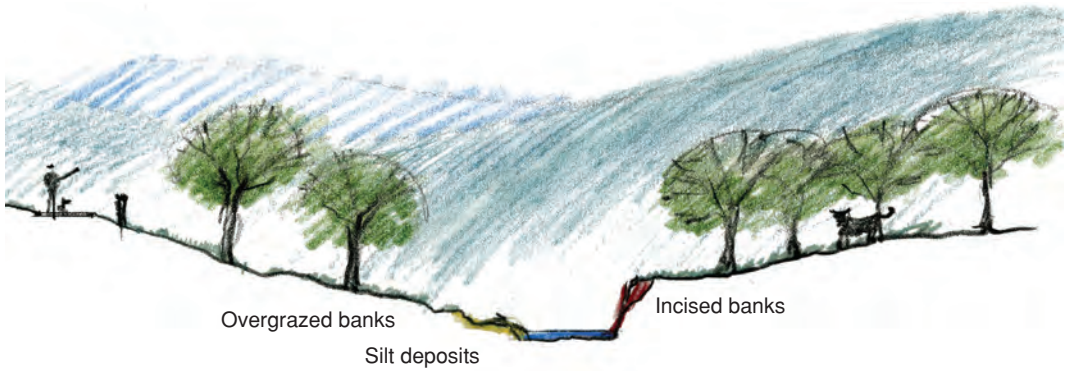
- Consider ecologically enhancing the waterways as part of your



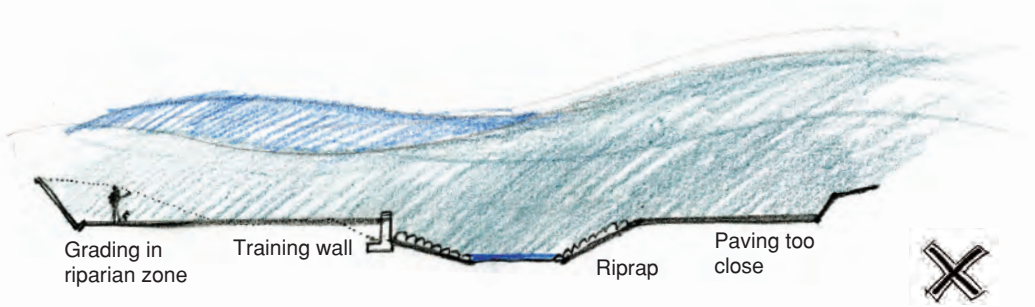
Typical stream damage because of nonvegetated banks.


Stream restoration provides a variety of plantings to the streambank, which attracts wildlife.



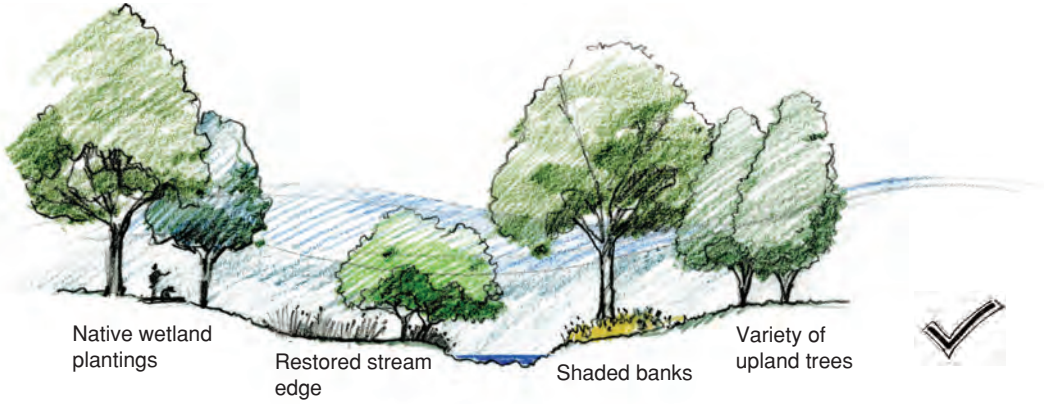


Sometimes the existing stream will already be less-than-healthy, because of past agricultural practices, channelization, and upstream erosion and sedimentation.



In this scenario, the owner's program calls for expensive destruction of the natural stream environment, a mathematical model is applied, widening the channel to take care of all the floodwaters that will quickly run off the site.





In this alternative scenario, a professional has designed the streambank to be restored with sensitive grading and native plantings. The channel can be relaxed, creating wetlands in flood prone areas. Shaded stream benefits the fish.

subdivision landscape plan. Waterways can be enhanced to attract native birds, fish and plant communities by employing stream restoration experts and methods.

- Waterways can become part of a greenway system, with pedestrian walkways, ponds, bridges and weirs.

- Consider donation of a riparian buffer strip along streams and channels. Easements can be granted, with substantial tax credits. This helps ensure the retention of the waterway in the future.

- Consider creating HOA-owned riparian strips in the subdivision as a means to ensure the retention of the waterway in the future.

- Consider turning new water catchment areas into amenities, such as rain gardens (below).



Median rain garden.

LID or LINU

Recently there has been a flurry of research and experimentation dealing with alternatives to the "pipe and pit" solutions to stormwater retention. First the techniques of Low-impact Development, or LID, emerged and found their way into the design field. As a response to these techniques, a more integrated and aesthetic design process of techniques termed Light Imprint New Urbanism, or LINU, has been advanced. Both systems have materials available online:

Low Impact Design:
http://www.lid-stormwater.net/

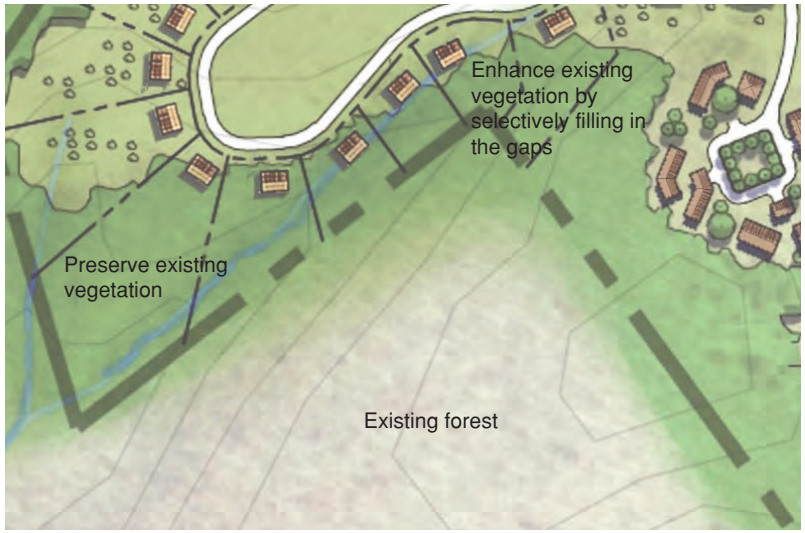
Light Imprint New Urbanism:
http://www.cnu.org/node/1209

Vegetation Preservation

One of the greatest resources on the site for visual enhancement, climate control, erosion control, habitat, and value of the property is the existing vegetation. Swaths of existing trees can bring a premium when land is subdivided, because their value is transformed from timber value to aesthetic value. Add to this the value of shade, the presence of birds and other animals, and the value of healthy, undisturbed ecosystems, and those trees are worth preserving.

- Restore damaged woodland edges where they have been cut back. Consider carefully the natural character and environment of the forest edge and restore damaged edges in a natural way using native plant materials. Enlist the assistance of an arborist or a landscape architect when possible.

- Preserve the vegetative character of the natural ridge lines as seen



from the Parkway. Restore visually critical woodlots disrupted by construction.

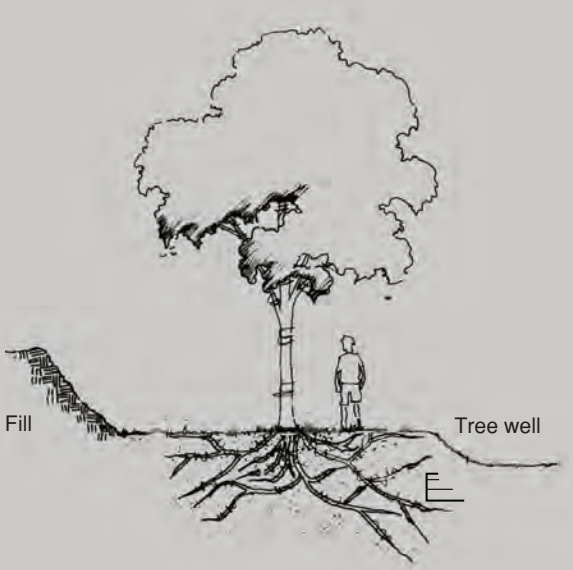
- Design structures and roads around mature trees and integrate with existing vegetation. Remove only minimum vegetation necessary for grading and construction.

- Protect existing trees and vegetation during site preparation and construction. In general, the limit of the branches, known as the drip line, is a good guideline for the minimum extent of protection for tree roots during construction activities. Do not plan to excavate within the drip line.

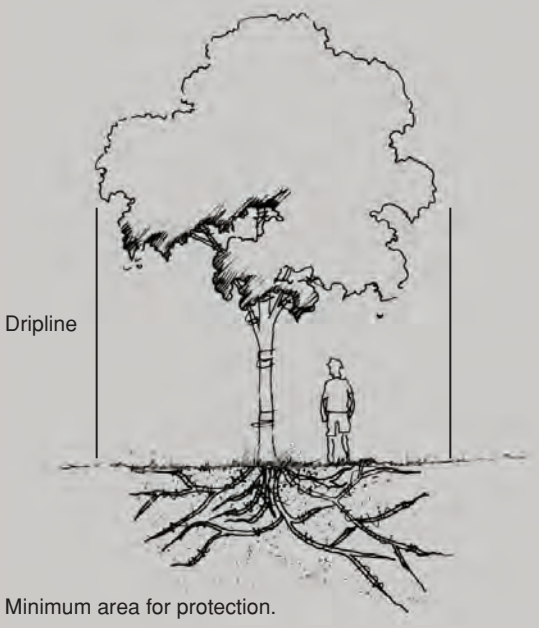
- If excavation within the drip line cannot be avoided, retain a certified arborist to make root cuts and care for the tree. Use tree wells, fertilization, pruning and other landscape techniques to help preserve existing trees and to help damaged ones to survive.

- Consider extending existing nearby clusters of trees or woodlots into the site as part of subdivision design. This will make the subdivision appear as part of the existing landscape.

- For restoring areas of vegetation, refer to the Planting guidelines, in chapter 4.



A tree well may save a tree in a tight situation.



Minimum area for protection.

Chapter 4
Landscape Design

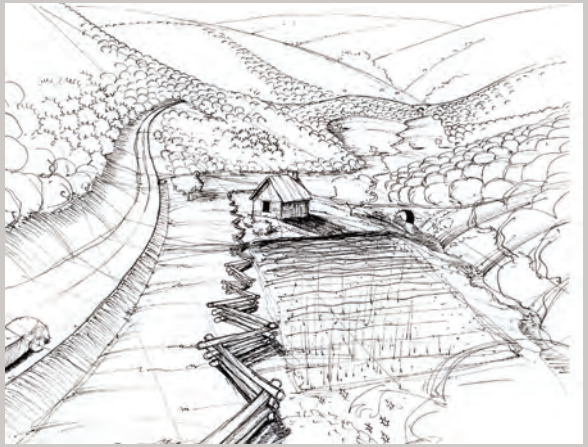
"It is one of the things that gives the Parkway character as you drive along – this freedom from the impression of a boundary line. It is a marriage to the country, to the farm or the woodland. The countryside becomes handmaiden to the road."

– Stanley Abbott, 1958

Site Elements

Blending the built environment with the adjacent countryside remains one of the remarkable achievements of the early Blue Ridge Parkway design office. A small group of landscape architects moved into the region and developed a palette of design materials from elements of the host landscape. These simple compositions of materials – snake fences, wooden gates, stone walls, and displays of native plantings - became the building blocks of the Parkway landscape.

As development is proposed adjacent to the Parkway, the spirit of blending the built environment with the boundless Blue Ridge landscape can be manifest in the landscape details of your development. This chapter describes the rich detail of the Blue Ridge agrarian landscape, and suggests how to make your landscape blend with the native patchwork of farms and woodlands.



It is not a single element that makes the experience but the repetition of the details during the journey.



In 1974, Parkway photographer C.E. Westveer captures the detail of the worm fence at milepost 189. (Blue Ridge Parkway Photographic Archives.)



In 1946, NPS photographer Abby Rowe captures the linear rhythm of the worm fence. (Blue Ridge Parkway Photographic Archives.)

Fences

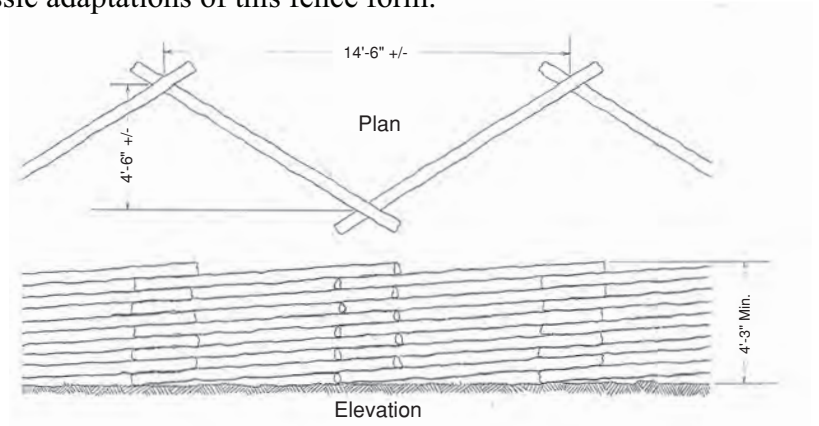
Some of the most memorable elements of the scenic Blue Ridge landscape are the iconic fences.

The Parkway's fence varieties correspond to individual site needs and applications. The next several pages illustrate some of their traditional uses.

Snake or Worm Fence

Historically, snake or worm fences are the most common fences along the Parkway. Such fences are easily constructed, as no posts have to be driven into the ground, which is a definite plus in the rocky soil, but they take up considerable room due to their winding profile. Snake fences were originally made of American chestnut, and supplemented with other split woods such as black locust and oak after the 1920s arrival of the Chestnut Blight. Many of the century-old Chestnut split rails are still in use.

Shown to the left, snake fences in the Rocky Knob and Bluffs districts are classic adaptations of this fence form.



Worm fence with post bracing, National Park Service, 1943. (Blue Ridge Parkway Archives.)

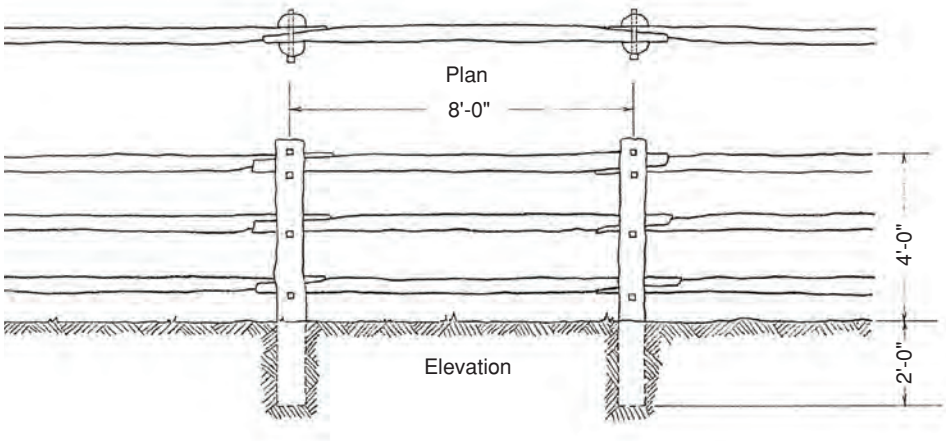
Post and Rail

Post-and-rail fences consist of two posts driven parallel to one another, with horizontal rails laid in between. These are seen in less-rocky ground than the snake fences. Fewer rails were required because the fence was straighter, but it does require posts in the rocky ground.

The post and rail fences lining the roadway of Doughton Park are some of the most memorable features of the Parkway. Their purpose is twofold: to reinforce the roadway alignment and to define agricultural borders.

Post & Peg Fence

A post and peg fence resembles a post and rail fence, but with fewer rails. The three-rail compositions are held up with pegs. This fence achieves many of the benefits of the post and rail, but achieves an economy in materials. It also allows views between the rails. The pegs will require more craftsmanship than the post and rail.



Post and peg rail fence, National Park Service 1943. (Blue Ridge Parkway Archives.)



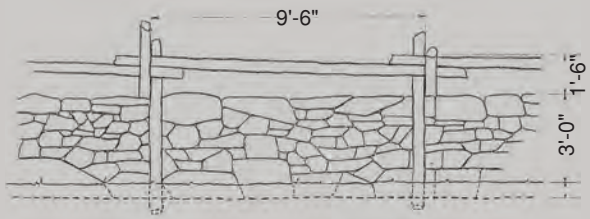
NPS photographer Fawcett captures post and rail fences in Doughton Park, 1950. (Blue Ridge Parkway Photographic Archives.)



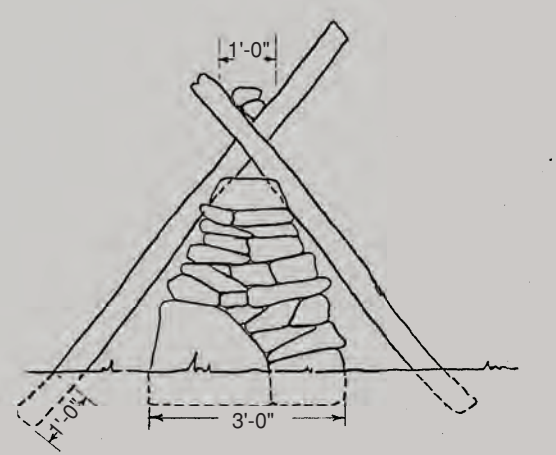
Transparent qualities of barbed wire fence, MP 26.



Field stone fence. (Kelterson, 1975. (Blue Ridge Parkway Photographic Archives.)



Field stone with rider fence, National Park Service, 1943. (Blue Ridge Parkway Archives.)



Field stone with rider fence, National Park Service, 1943. (Blue Ridge Parkway Archives.)

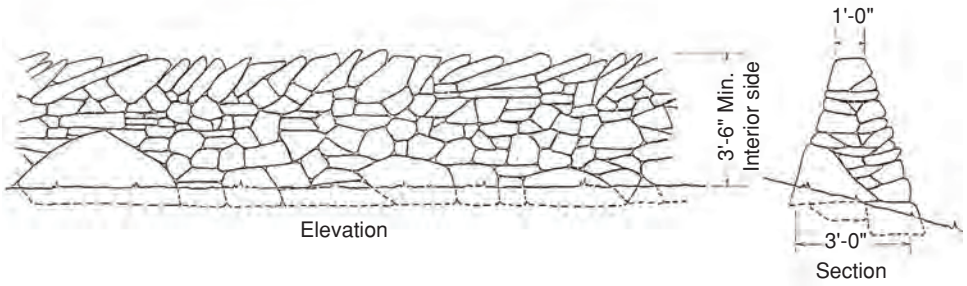
Barbed Wire Fence

Most of the rails lining the Parkway are American chestnut. When Parkway officials encountered shortages for keeping their fences in repair, they would trade new barbed wire fence materials for the rail fences of local farmers who wanted fences that took less space and were easier to keep clean. As shown in the barbed wire fence at MP 26, one advantage of the barbed wire fence is that it is easy to see through. Consider barbed wire fences. They provide clear views, are cheap to construct, and are appropriate in rural landscapes.

Field Stone

Field Stone fences can be found on some of the older farms in the Blue Ridge. Although not as common as the rail fence styles, they provided a way to use surplus stones taken from orchards and pastures, to create a boundary. Traditionally, the cap is created with flatter, angled stones, which serve to lock in the lower stones as a protection from falling branches and other wear.

Sometimes a field stone, or "hog," fence is supplemented with a log rider, which raises the height of the fence to hold taller livestock. The hog fence at Humpback Rocks (MP 6) is the last one remaining on the Parkway.



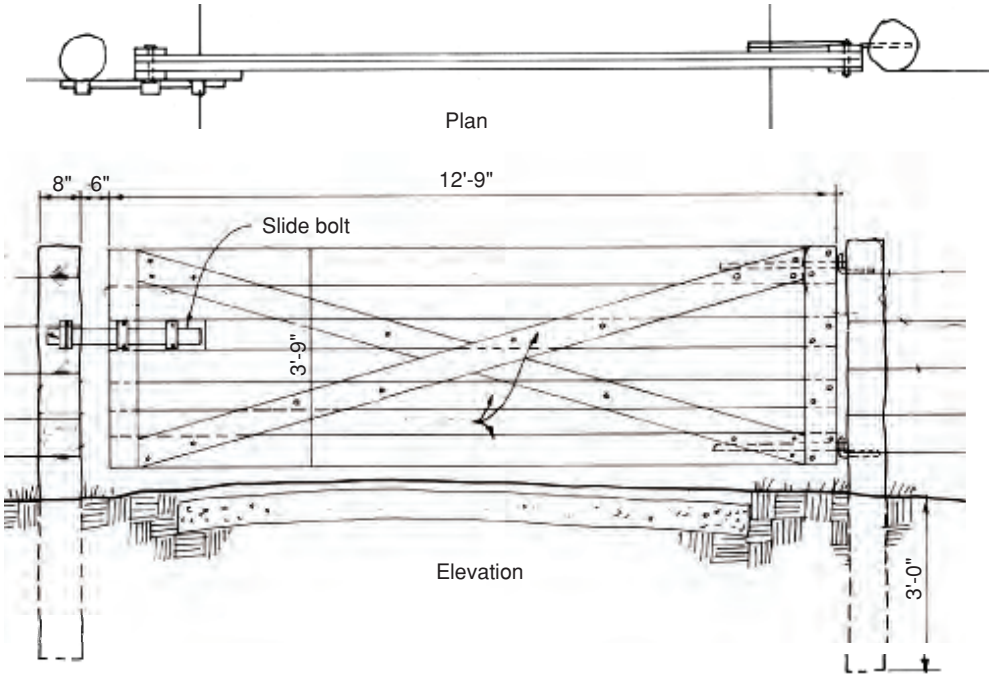
Field stone: National Park Service, 1943. (Blue Ridge Parkway Archives.)

Buck or Yankee Fence

Buck fences consist of two posts driven into the ground at angles to form an "X", the same form as a saw buck which lends the fence its name. A rail is lain into the "X" and the pattern is repeated. These types of fences are difficult to construct and consequently, few are found on the Parkway.

Picket Fence

Picket fences are constructed from identical sawn or split boards secured to upper and lower rails between posts. "Scantlings," or irregular boards, are commonly used as well. These are most often seen around gardens or near a farmhouse, such as at the Johnson Farm, or at the Puckett Cabin (MP 189).



Wooden Gate. (Blue Ridge Parkway Archives.)



Buck or Yankee fence. (D.H. Robinson 1963. Blue Ridge Parkway Photographic Archives.)



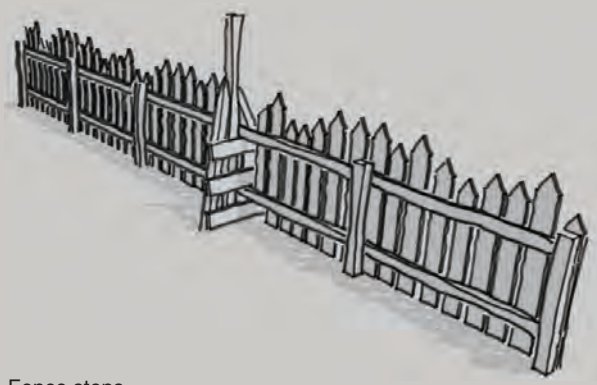
Picket fence at Sutphin Home. (L. Arberger 1956. Blue Ridge Parkway Photographic Archives.)



Wood pole gate between field stone fence. (Wally A. Johnson, 1943. Blue Ridge Parkway Photographic Archives.)



Picket kissing gate.



Fence steps.

Fence Details

Wooden Gate

There are many adaptations of the simple wooden gate. White oak lasts longer than the other oaks, and is readily available. Usually it is set at the same height or slightly higher than the adjacent fence system, but never higher than the gate posts. J-Bolt and Strap hinges are the most frequently used.

Wood Pole Gate

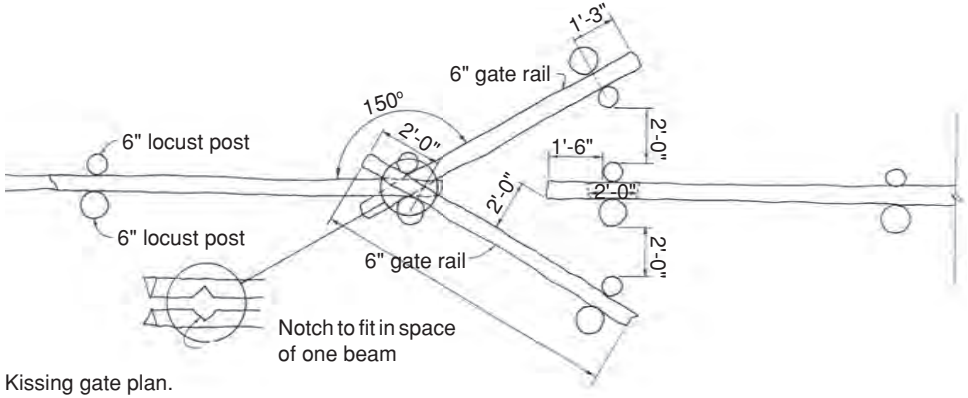
The wood pole gate can be made without boards, or hinges. Sapling poles, most commonly black locust, are placed horizontally between twin vertical posts with horizontal supports resembling a ladder. Usually individual poles are slid out for access. In the photo to the left, the entire assembly lifts out.

Kissing Gate

Kissing gates provide access for people, but are too small for livestock to pass through. Their split-Y shape fools the eye, looking like an enclosed fence at the eye level of livestock.

Fence Steps

Another clever device for accessing fields is a set of fence steps, or fence ladder. This device is seen at many of the trail crossings at Rocky Knob.



Kissing gate plan.

The Parkway fences can be replicated easily by careful developers and land owners. Extending this tradition contributes not only to the visual landscape of the Parkway, but also to the farming heritage that inspired the Parkway fences. In addition to modeling your fences on the styles shown above, apply these general guidelines in fence development:

- Limit the amount of fencing to retain views and preserve the character of the open, rural landscape.
- Consider using a fencing covenant as a way of controlling the amount of fencing in your development. This will help to retain the open rural character.
- Reduce the amount of fencing in a subdivision by using plantings such as hedges and shelterbelts. Hedges make great fences for screening views and delineating boundaries.
- Use development covenants to control the location, design, color and height of fences. Use fences that are typical to the Parkway. Coordinate the type of fence with its intended use. Consider the slope of the land, slope of the fenced area, soil conditions, gate locations, maintenance responsibilities, and aesthetics. Use materials that will weather to recommended gray and earthen colors of the Parkway for the fence rails and posts. Avoid white or brightly-colored fences and gates.
- Consider invisible fences for dogs. This benefits wildlife movement.
- Locate chain-link style fences outside of view of the Parkway, and away from any amenity areas. Black vinyl-coated chain-link fencing is preferred. Do not use shiny, exposed galvanized chain-link fences, or plastic, vinyl or rubber fences.



Chief Landscape Architect Stanley Abbott reviewing locally built wall detail. (Edward H. Abbeuhl. Blue Ridge Parkway Photographic Archives.)



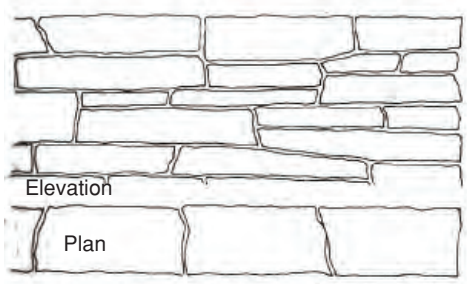
Local house foundation that served as a model for Parkway masonry. (Edward H. Abbeuhl, 1935. Blue Ridge Parkway Photographic Archives.)

Walls

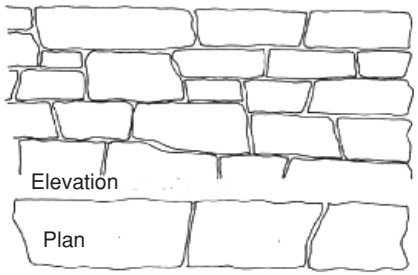
Almost as iconic as the fences, the stone walls are a very important feature along the Blue Ridge Parkway. Parkway designers produced measured drawings of the native Blue Ridge masonry styles in the 1930s. These became the standards for bridge textures, landscape walls, culvert headwalls, and other details of landscape construction originally implemented by the Civilian Conservation Corps and Works Progress Administration forces. Many of these spectacular structures are not visible to the Parkway driver, but await the hiker, fisherman, or anyone else who wanders beyond the edge of the road.

Originally termed “Class A” and “Class B” cement masonry by the Parkway design office, these terms were later revised to be the more descriptive “Exposed Ledgerock Pattern” and “Roughly Squared Pattern.”

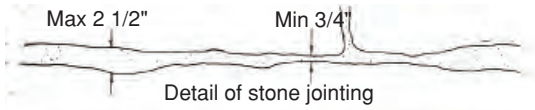
These simple drawings provide remarkable information about the guidelines for Parkway masonry, derived from the style of the Appalachian farmers. Use these to guide the construction of your stone walls.



Class "A" cement masonry/Exposed Ledgerock Pattern: Extra large stones in the corner and 8" minimum thickness for the top course.



Class "B" cement masonry/Roughly Squared Pattern: 6" minimum thickness for the top course.

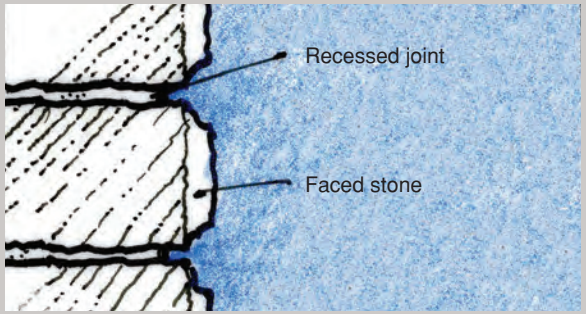


Detail of stone jointing

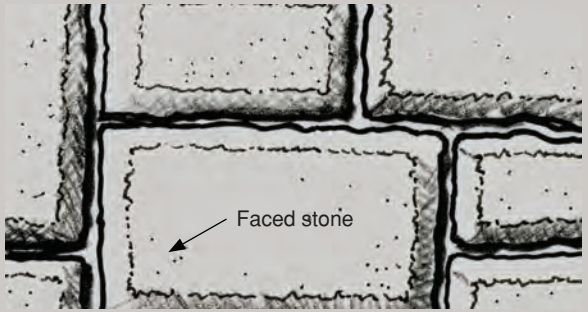
As development occurs adjacent to the Parkway, consider these wall-making guidelines:

- Landscape walls should be composed of locally-available stone. The exact match to Parkway stone is a Georgia gray color of granite, available at quarries in the Elberton, Georgia, area. These stones match most closely the stone used on Blue Ridge Parkway walls and bridges. At one time, there were several North Carolina quarries that supplied gray stone, but not in the quantities and consistency needed for large-scale Park Service projects. The Elberton stone is readily available.
- Local granite and limestone is also acceptable, which will vary according to availability at your local quarry. Collected field stone is preferred to deep-quarried stone, because it will have earthy coloring, with streaks and spots, moss and lichen.
- Rough-hammered and faced stone is most preferred, to match the existing Parkway stone. However, horizontally-banded ledgerock-style stone is also acceptable.
- Avoid walls constructed of other material such as brick, stucco, concrete block (CMU), wood, railroad ties, or other materials that are not native to the Blue Ridge.
- Stone culvert headwalls can create a striking statement through their attention to detail. They are a modest investment and they save money in long-term maintenance of the slope around a culvert.

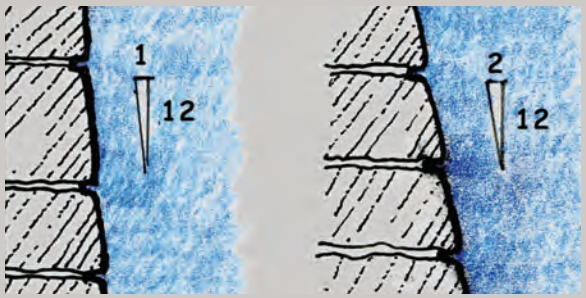
Elements of Wall Construction



Stone pattern in section. These sketches (above and below) illustrate stone facing and recessed joints.

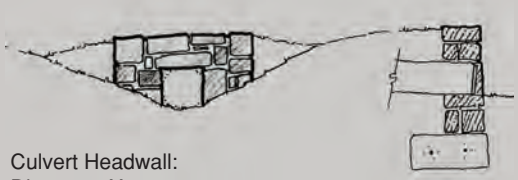


Stone pattern in elevation.



Batter: Free standing stone walls appear more stable when battered. 1:12 is the original Parkway standard.

Headwalls



Culvert Headwall:
Diameter: X
Wall Width: 3x
Wall Height: 2.2x

Culvert headwall typical dimensions.

Roughly Squared Pattern Walls



Parkway staff built clay models to experiment with three-dimensional masonry details. This model uses roughly squared pattern blocks.

Exposed Ledgerock Pattern Walls



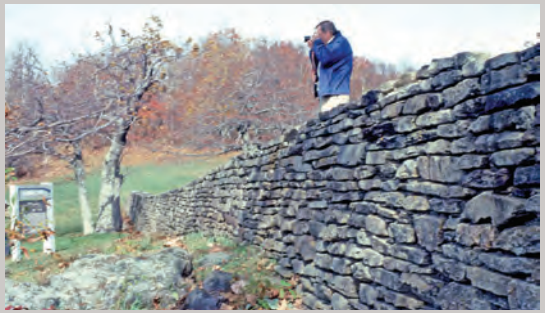
Exposed ledgerock pattern seatwall and stone curb at Rocky Knob.



Culvert headwall. (Edward H. Abbeuhl, 1937. Blue Ridge Parkway Photographic Archives.)



Roughly squared pattern bridge.



Exposed ledgerock wall at Rocky Knob. Notice batter on wall.



Box culvert wingwall. (George Wickstead, 1936. Blue Ridge Parkway Photographic Archives.)



Snow clinging to faced wall stones.

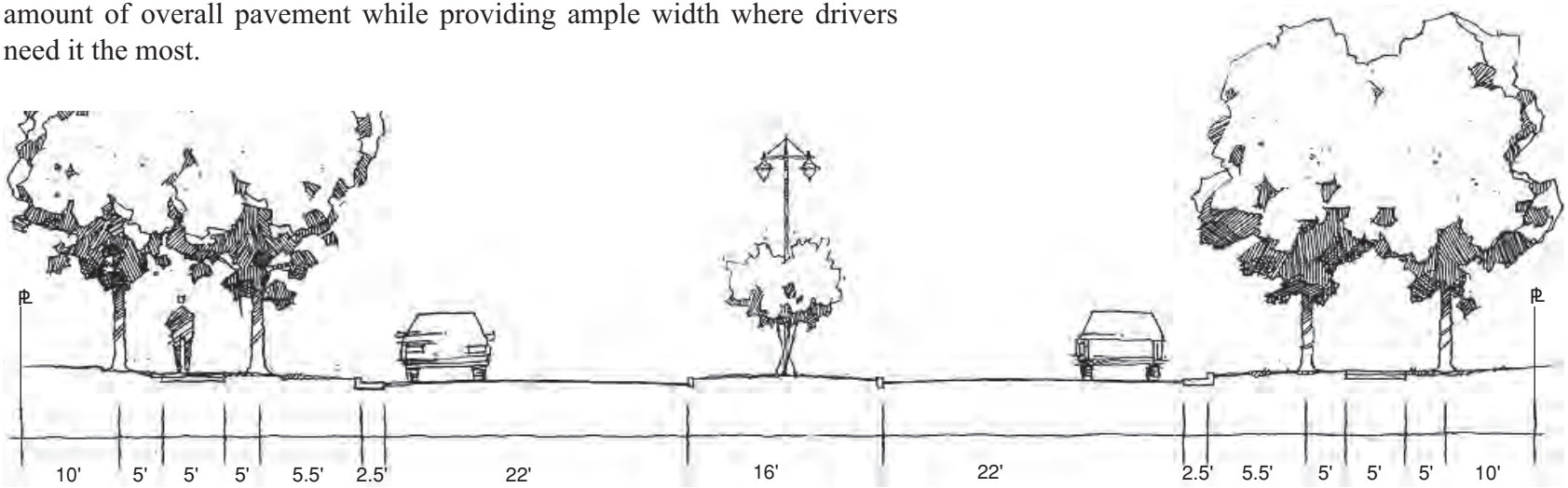


Allow moss and lichen to grow on stone walls.

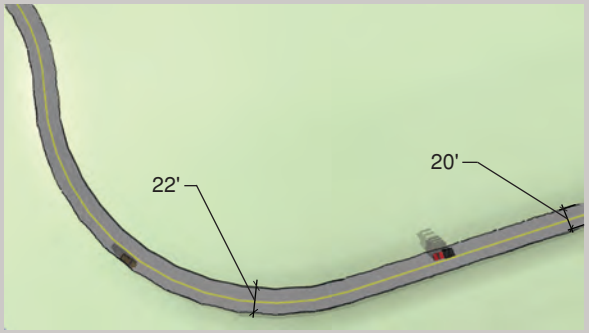
Roads

The Blue Ridge Parkway designers revolutionized the art of placing paved surfaces in the mountain landscape by originating many subtle techniques that apply to mountainous terrain. When used effectively, it can be difficult to discern where a well-graded road transitions back to nature. Environmentally sensitive planning and design of your paved areas will produce a more natural appearance and provide an effective method to reduce stormwater and its pollutants by reducing the volume of surface run-off, increasing infiltration, and preventing pollutants from entering the ditches and streams. Please refer to your State Erosion Control Manual for further information on this topic.

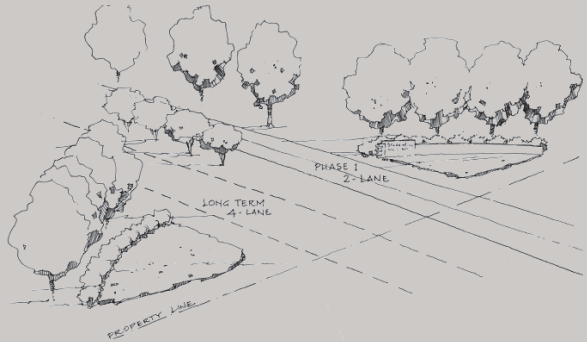
In detailing roads, the size, amount and frequency of traffic should help determine the material and the detailing of the roadway surface. A road does not have to be wide to accomplish its mission. Creativity can save a lot of pavement. For example the Blue Ridge Parkway motor road is 20' wide in the straightaways, widening in the curves to 22'. This detail reduces the amount of overall pavement while providing ample width where drivers need it the most.



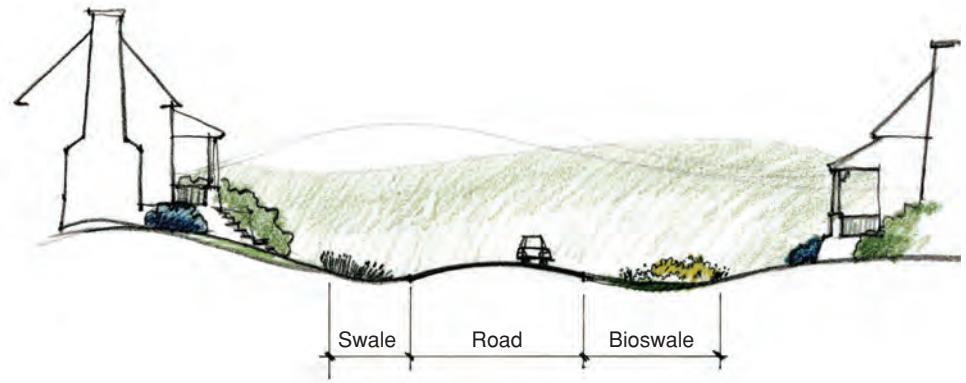
Allow for the road to be part of a designed system. This 4-lane boulevard takes up 35% of the total road system.



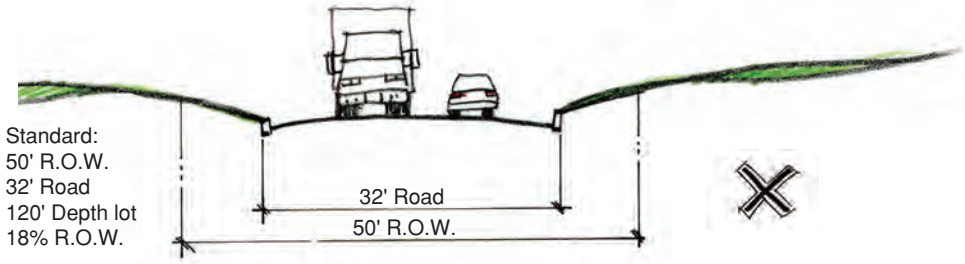
The Parkway's straightaway widths are 20' while the curves are 22' wide.

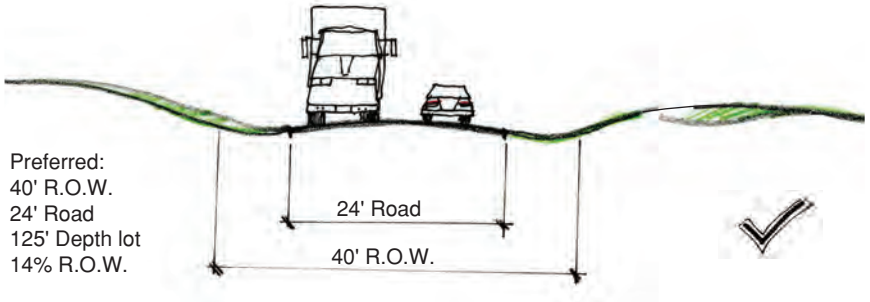


Thinking long term. Provide ample right of way to allow the landscape to survive uninterrupted.



Provide generous Parkway-like water control devices in a roadway system.



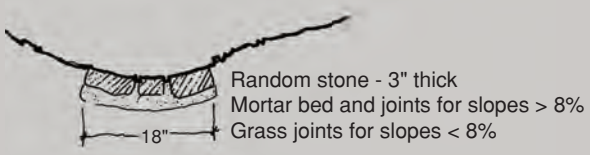


Right of ways. Compressing the right of ways to 40', a subdivision can add 5' to each lot and sell 4% more land.

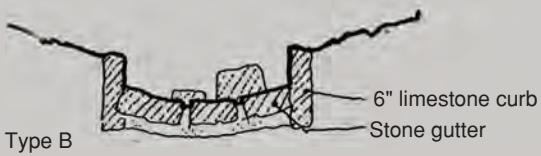
Consider these additional guidelines:

- Depending on the amount of cars, asphalt may not be the best pavement. Many rural roads in the Blue Ridge use a prime and seal process, also called chip-seal, which serves reasonable traffic flows with lower initial costs.
- For low-traveled routes, the use of gravel roads without hard edges helps retain rural character. However, these can be environmentally and visually detrimental due to the gravel dust they throw into the landscape, and gravel that escapes into ditches, woods and streams. With more intensive use, gravel roads are less preferable.
- Avoid standard concrete curbs and gutters. Granite curbing is preferable to concrete or other materials. The Parkway uses curbs only in parking areas, more as a deterrent and guide to wheels than for directing the flow of stormwater.
- Stone gutters, located away from the road, are preferred to concrete gutters adjacent to the road.
- Adjacent to the road, gracefully carved and curvilinear swales are preferred to straight channels.
- Roughly-squared granite or fieldstone energy-dissipating aprons are preferred to quarried limestone rip rap.
- In rural areas, provide generous, low-sloped water control channels filled with plants that thrive on being wet or dry. These purify the water before it reaches streams.

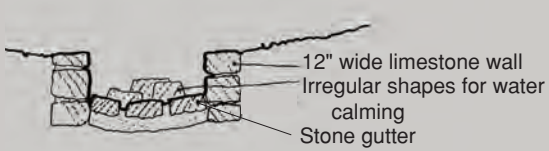
Stone Gutters



Type A



Type B



Type C



Typical stone gutter.



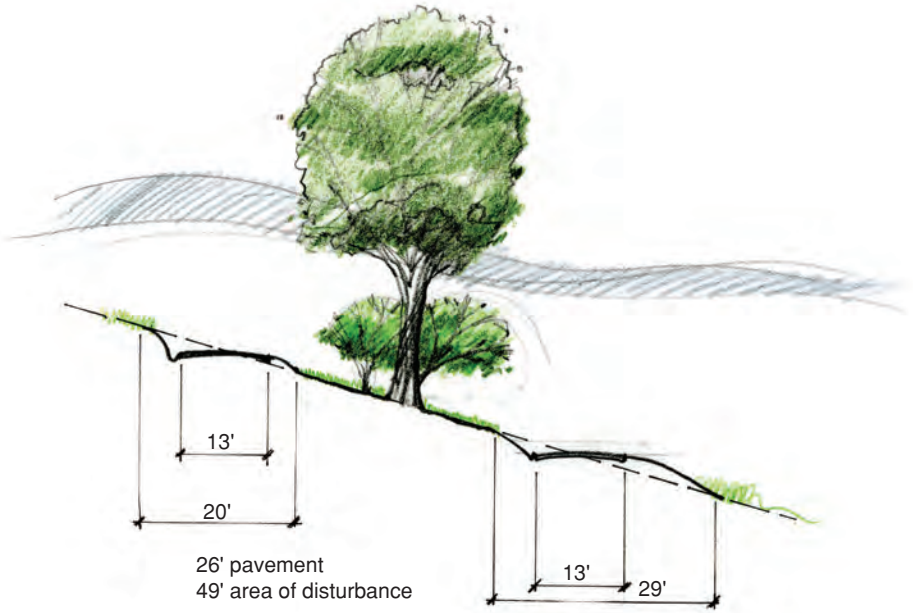
Asphalt road for high use.



Prime and seal road for moderate use.



Gravel road for lowest use.



In the section above, the road is designed to have minimal impact on existing large trees. The new roadways and the grading necessary to create them lie outside the dripline of the existing vegetation.

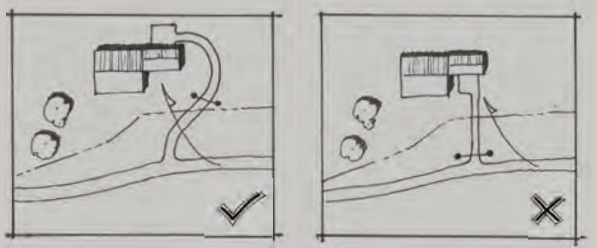


Design roads to preserve existing resources. In this example, lanes are split to save an existing tree grove.

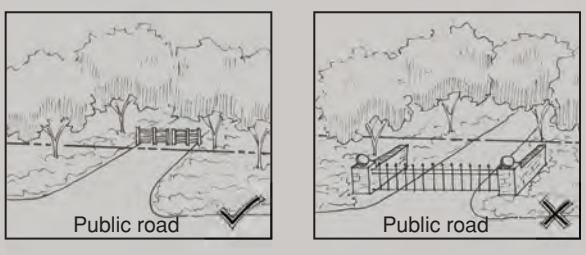
Driveways

The entrance to an individual lot, whether a church, store, or home, is an important feature that must convey a sense of welcome, without appearing too visible from the Parkway. These guidelines for driveways should apply to your development:

- Use curvilinear grading and plantings to blend new driveways with the adjacent natural environment.
- Reduce visibility and obtrusiveness of entryways by setting gates, pillars, etc. back from the roadway.
- Use indirect lighting at entryways to minimize glare to travelers.
- Keep structures, including light fixtures or other appurtenances, below the windshield line (3' to 4'), to prevent visual obstructions to drivers.
- The width of driveways in areas viewable to the Parkway should remain less than 12 feet in width, unless a greater width is required for fire protection purposes. Driveways can be narrower, if they are straight.



Curvilinear driveways and plantings to blend with the environment.



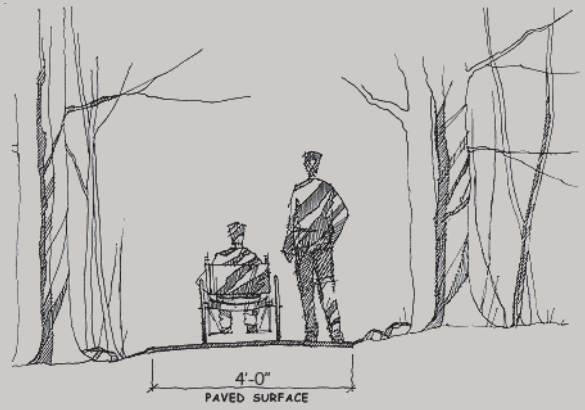
Gateways should be inobtrusive and blend with the surroundings.



Trails offer a different experience than the road.



#10 Gravel in low area and log water bars.



5% Max slope on accessible trails.

Paths

Footpaths do not need to follow the roads. Consider making the footpaths meander along the woods edge, follow waterways, cross bridges, and generally link the site's amenities and views to the broader landscape. Link your development's houses directly to the amenities along the trails.

Consider people of all ability levels when designing your trails. Provide a spectrum of difficulty to address all ability levels. A design professional should assist the developer in creating minimum accessibility required to all amenities. Beyond this universal-access requirement, there can be additional trails that represent a more challenging route. These additional trails do not have to be hard-surface.

- Consider a palette of trail materials that matches the trails of the Blue Ridge Parkway. Paved trails for universal access are typically



Link amenities with your trails

4’ in width, constructed of asphalt, with a slope of less than 5%.

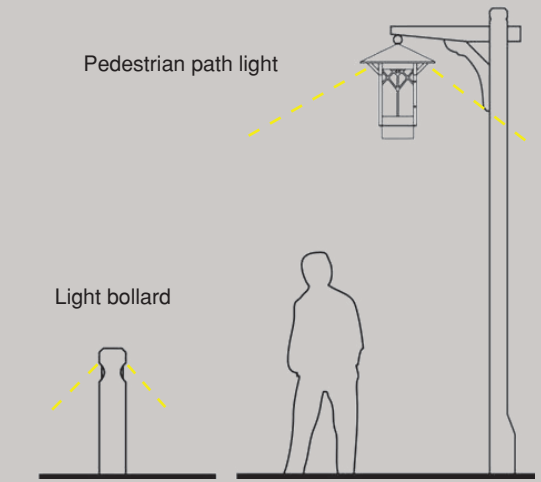
- Strenuous trails can be unpaved, but at a minimum should have #10 gravel through muddy areas, and should be created with water management practices such as log water bars, etc. to control erosion.
- Utilize timber bridges over stream crossings. They should be of natural colors that weather well.

Exterior Lighting

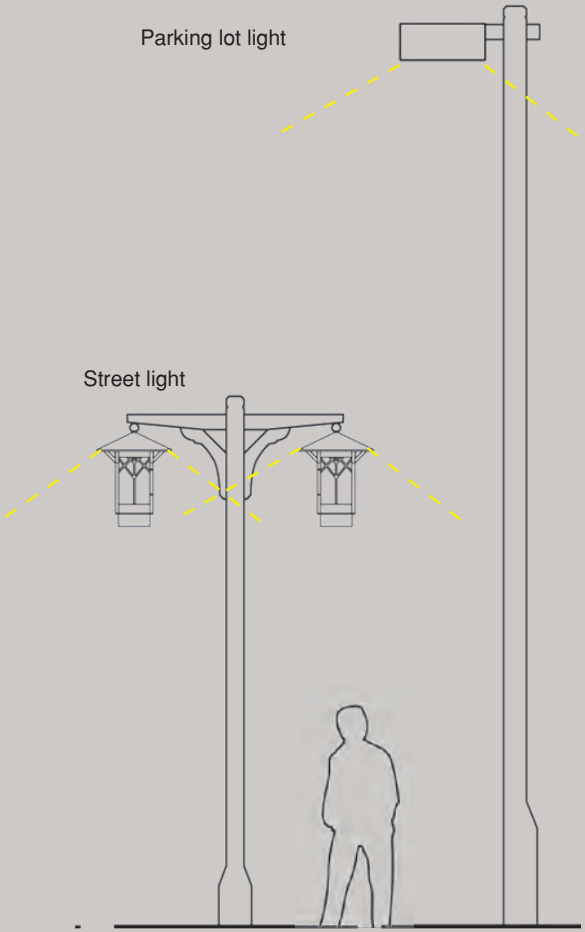
The lack of lighting in the native landscape distinguishes the Blue Ridge environment from the nearby population centers. In the tradition of the Blue Ridge, lighting should be kept to a minimum. The location and style of exterior and interior lighting chosen for a development, or as a welcome statement for a single-family home can have a significant visual impact. It can affect adjacent neighbors, or depending on topography, more distant views from scenic areas and the Parkway. An appropriate lighting plan will support the development design and provide adequate light and security for the site. The lighting plan should focus on preventing direct light and glare from extending in any direction, including upward, beyond the boundaries of the site. In general, low level lighting directed toward the ground is preferred.

Standards:

- Choose lights that are dark sky friendly (night-sky friendly in some references). These direct the light down, rather than letting it escape up and ruin the starry night through light pollution. There are some new professional associations to help owner find these, such as the International Dark Sky Association (www.darksky.org).



Typical night sky friendly lights.



Typical night sky friendly lights direct light downward.



- Choose exterior lighting that is architecturally integrated with the home's design, style, material and colors.
- All exterior, landscape and site lighting should be located so that light and glare are directed away from neighbors' views, and confined to the site. Low-intensity lighting directed toward the ground is encouraged.
- Exterior lighting should be minimized and designed with a specific activity in mind so that outdoor areas will be illuminated no more than is necessary to support the activity designated for that area. Provide switches or motion detectors instead of dusk-to-dawn illumination, so activity lights will be off when not needed.
- Minimize light and glare as viewed from the Parkway and other public view corridors.
- Consider metal halide light bulbs where quality of light color is paramount, and color-corrected low-intensity fluorescent bulbs for other applications. Sodium and sodium-vapor light sources are less-preferred, as these cast an unnatural orange glow on the landscape.

Signage

People come to the Virginia and North Carolina highlands to escape the cluttered landscape of other places, and it does not take much signage to look out of place and garish. In rural areas keep signage simple and functional. Avoid over-embellishing the landscape with written words.

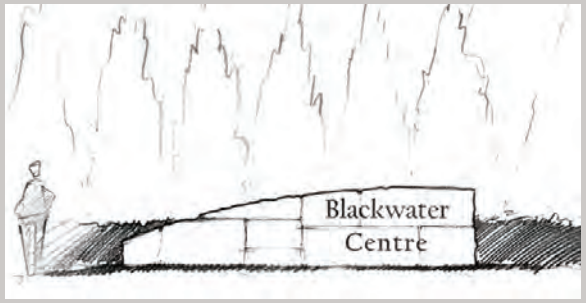
Both Virginia and North Carolina have state regulations prohibiting outdoor advertising near the Blue Ridge Parkway. In Virginia, a billboard can not be located within 600' of the Parkway boundary. In North Carolina, all billboards must be kept at least 1000' from the centerline of the motor road.

Standards:

- If a sign is necessary to announce a subdivision, or an institution such as a store or church, try to make the colors, style and overall appearance of a subdivision sign fit into the landscape.
- Incorporate local materials and construction techniques in subdivision signs, like rocks, timbers, stone walls, or wood fences.
- Face signs away from the Blue Ridge Parkway.
- Avoid internally-illuminated signs.



Building mounted sign, color coordinated with dark sky friendly downlights.



Incorporate local materials, such as boulders, into your sign.

Miscellaneous Landscape Details

Innumerable bits and pieces of the constructed landscape can either be tastefully incorporated, or litter the visual harmony of the Blue Ridge. When building near the Parkway, please also consider these details:

- Many distributors now make an underground solution to propane tanks, although it is not as common as the above-ground version. The extra money it takes to obtain an underground tank may recoup itself easily if you consider the visual harmony, potential safety, and resale value of the facility.
- Mail boxes should be dark earth colors, black or gray. Shiny aluminum, white or metal mail boxes are not desired.
- Satellite dishes, antennae and other communications devices should not be visible from the Parkway.
- Above-ground planters are discouraged. In the natural setting of the Blue Ridge, these should not be necessary.
- Swing sets, dog pens, basketball courts, and similar recreational devices should not be visible from the Parkway.
- Recreational vehicles (RV's) and boats on trailers should be stored in an area not visible from the Parkway.
- Prefabricated above ground swimming pools or spas should be screened from the Parkway.
- Tents, pre-fabricated outbuildings and pre-fabricated storage sheds should be located so they are not visible from the Parkway. Choose dark gray or earth-tone colors for these facilities.
- Tarps used to cover woodpiles, and for other uses, should not be visible from the Parkway, and when they must be visible, they should be made of earth-tone dark greens, or browns. Avoid the common bright blue tarps.

Designing with Plants

Plants are the living, growing part of a landscape. They have the capacity to heal existing scars on the land, and to gradually incorporate changes back into the native landscape. Plants can also make your landscape healthier. In addition to providing the very oxygen we breathe, plants provide shade, wildlife habitat, they retain stormwater on the site, and purify the air. Installing new vegetation is important, but careful planning to retain existing vegetation is cheaper. Discussed in the site design section, whenever possible achieve screening and shading using existing vegetation and topography as part of the overall design of your development. New vegetation may be required to supplement the designs in new development.

In this section, you will find:

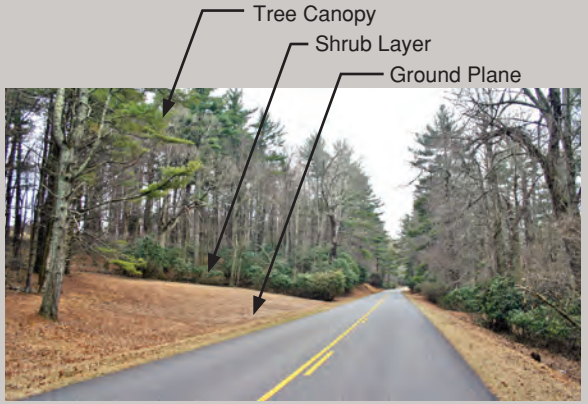
- Techniques the Parkway landscape architects use to manipulate layers of vegetation.
- Advice on preparing a planting plan for new trees and shrubs.
- Recommended types of plants.
- Maintenance suggestions.

Painting the Parkway with Broad Strokes

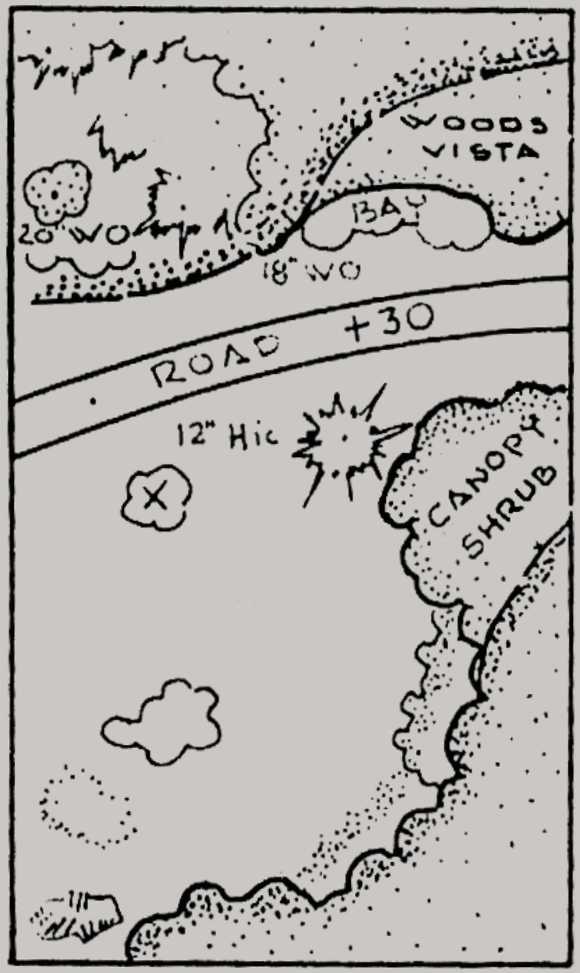
Gaining inspiration from the native Blue Ridge landscape, historically the Blue Ridge Parkway designers simplified the landscape to be understood at 45 m.p.h. To achieve this, they manipulated three distinct layers to gain a variety of visual effects: the ground plane, the shrub layer and tree canopy.

The ground plane consists of plants at or just above the ground level. In open areas, grass or wildflowers can grow, generally about a foot or so in height. In the woods, ferns and other natural wildflowers can be found.

The shrub layer consists of native mountain shrubs. Flame azalea, mountain



Blue Ridge Parkway designers manipulate three vegetation layers.



Parkway designers used planting to create and reinforce desired views along the Parkway by manipulating three planes of vegetation. This drawing shows trees to be retained and planned vegetative bays along a stretch of the Parkway.

laurel, and several types of rhododendron dominate this category in Parkway plantings. These large shrubs range from about 5' to 10' in height. Found naturally in clusters, the locals refer to dense masses of rhododendron as "slicks," because they can be very wet and slick.

The canopy layer consists of tall native trees, which provide high shade.

The Parkway staff manages these layers of vegetation to enhance the visitors' experience. Mixing the visual composition of the three planes provides a variety of effects. These vegetative themes include:

- Vista: An area occasionally cleared of all but the lowest vegetation, to provide a distant view for the visitor.
- Grass Bay: These areas along the parkway provide visual relief from the forest experience. They are used not only as visual tools, but also as informal recreational spots.
- Shrub Bay: These bays showcase the native blooming shrubs found along the Parkway; they have been strategically placed to draw the eye.
- Wildflower Bay: These bays showcase herbaceous plants and wildflowers. They were created on grass bays that were better suited for visual enjoyment, not stopping the car.
- Woods Bay: Sometimes referred to as "open woods," this vegetation feature provides an uninterrupted view of tree trunks.

Then there is some variation on the themes:

- Canopy Shrub Bay: Open woods draw the eye into a shaded shrub bay, deeper in the woods.
- Canopy Vista: A few tree trunks and shade frame open, distant views.

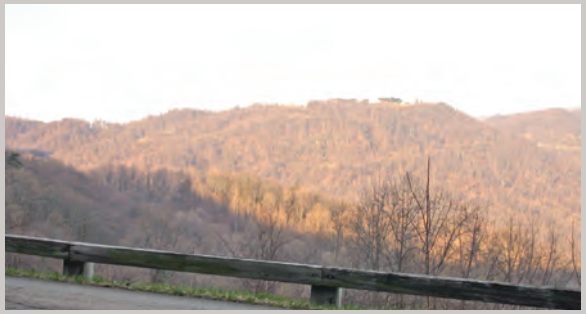


Canopy Shrub Bay. Open forest floor emphasizes group of flowering shrubs in the woods.



Canopy Vista. Tree trunks frame views of farmland in the distance.

Vistas



Vistas draw the observer into the view by removing the near vegetation and providing a clear and open view to the distance.



Vista of Blue Ridge scenery.



Vistas are part of the experience of driving the Blue Ridge Parkway.

Grass and Wildflower Bays



Grass Bays provide an open foreground view. Notice how they pull the traveler forward to see what is in the green space beyond the trees.



Wildflower Bays are similar to Grass Bays but maintained to encourage wildflowers instead of grass.



Wildflower Bay along Parkway creates visual interest.

Shrub Bays and Woods Bays



Shrub Bays are areas where other vegetation is thinned to feature a group of shrubs.



This Shrub Bay features native flowering shrubs.



The understory of a Woods Bay is often cleared to create views into the forest.

Combinations



Grass Bay with Shrub Bay beyond.



Grass Bay with Vista beyond.



Vista, then Woods Bay, then beyond the rock another Vista.

Plant Palette

The 1930s Blue Ridge Parkway designers dealt with a specific palette of native materials. In many places, logging and other non-sustainable agricultural practices had left the mountaintops bare. The Park Service planted many of the mature trees you see today. Landscape architects finalized the official plant palette in 1940. The plant palette as presented here has been updated to reflect current name references for each species. Although there are many other plants that flourish in the mountains, consider the list below a tested recommendation for plants found and surviving in the Blue Ridge. You may want to vary from it some to meet your needs. By incorporating this palette of plants into your design, you blend your landscape with the Park, and further the tradition of "freedom from the impression of a boundary line."

Keep in mind that this is a comprehensive list, compiled over a decade. Many of these plants may not be commercially available today.

Evergreen Trees

BOTANICAL NAME	COMMON NAME
Abies fraseri	Fraser Fir
Ilex opaca	American Holly
Juniperus virginiana	Eastern Red Cedar
Picea rubra	Red Spruce
Pinus echinata	Shortleaf Pine
Pinus pungens	Table Mountain Pine
Pinus rigida	Pitch Pine
Pinus strobus	Eastern White Pine
Tsuga canadensis	Eastern Hemlock
Tsuga caroliniana	Carolina Hemlock



Plant the majestic oak tree for your grandson not yourself.



Pinus rigida, Pitch Pine.



Pinus strobus, Eastern White Pine.



Acer saccharum, Sugar Maple.



Betula nigra, River Birch.



Liriodendron tulipifera, Tulip Poplar.

Canopy Deciduous Trees

BOTANICAL NAME	COMMON NAME
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Aesculus flava	Yellow Buckeye
Betula alleghaniensis	Yellow Birch
Betula lenta	Black Birch
Betula nigra	River Birch
Carya laciniosa	Shellbark Hickory
Carya ovata	Shagbark Hickory
Celtis occidentalis	Common Hackberry
Diospyros virginiana	Common Persimmon
Fagus grandifolia	American Beech
Fraxinus americana	White Ash
Juglans cinerea	Butternut
Juglans nigra	Black Walnut
Liquidambar styraciflua	Sweetgum
Liriodendron tulipifera	Tulip Poplar
Magnolia acuminata	Cucumbertree Magnolia
Magnolia fraseri	Mountain Magnolia
Magnolia tripetala	Umbrella Magnolia
Nyssa sylvatica	Black Tupelo
Platanus occidentalis	Sycamore
Quercus alba	White Oak
Quercus coccinea	Scarlet Oak
Quercus imbricaria	Shingle Oak
Quercus prinus	Chestnut Oak
Quercus rubra	Red Oak
Quercus velutina	Black Oak
Robinia pseudoacacia	Black Locust

Salix nigra	Black Willow
Sassafras albidum	Common Sassafras
Tilia americana	Basswood
Ulmus americana	American Elm

Low-growing Deciduous Trees

BOTANICAL NAME	COMMON NAME
Acer pensylvanicum	Striped Maple
Acer spicatum	Mountain Maple
Amelanchier canadensis	Shadblow Serviceberry
Amelanchier laevis	Allegheny Serviceberry
Carpinus caroliniana	American Hornbeam
Cercis canadensis	Eastern Redbud
Chionanthus virginicus	White Fringetree
Cladrastis kentukea	Yellowwood
Cornus alternifolia	Pagoda Dogwood
Cornus florida	Flowering Dogwood
Crataegus buckleyi	Buckley Hawthorn
Crataegus chapmani	Pear Hawthorn
Crataegus crusgalli	Cockspur Hawthorn
Crataegus flava	Yellowleaf Hawthorn
Crataegus phaenopyrum	Washington Hawthorn
Crataegus punctata	Dotted Hawthorn
Crataegus schuettei	Schuette's Hawthorn
Halesia tetraptera	Carolina Silverbell
Hamamelis virginiana	Common Witchhazel
Malus angustifolia	Southern Crabapple
Malus coronaria	Wild Sweet Crabapple
Malus glabrata	Biltmore's Crabapple
Ostrya virginiana	American Hophornbeam



Cornus florida, Flowering Dogwood, in snow.



Amelanchier laevis, Allegheny Serviceberry.



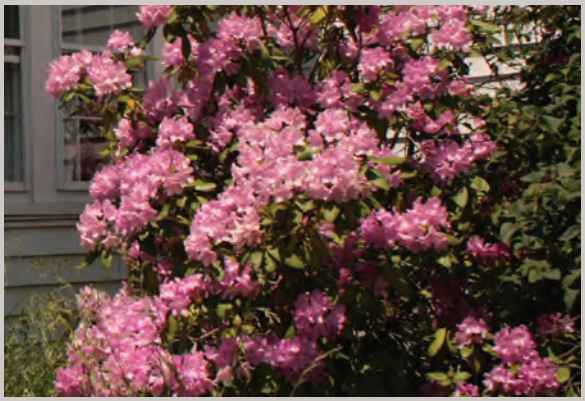
Cercis canadensis, Eastern Redbud.



Kalmia latifolia, Mountain Laurel in bloom.



Rhododendron catawbiense, Catawba Rhododendron.



Rhododendron carolinianum, Carolina Rhododendron.

Oxydendrum arboreum	Sourwood
Prunus americana	Wild Plum
Prunus serotina	Black Cherry
Robinia viscosa	Clammy Locust
Sorbus americana	American Mountainash
Viburnum prunifolium	Blackhaw Viburnum

Evergreen Shrubs

BOTANICAL NAME	COMMON NAME
Kalmia angustifolia	Lambkill Kalmia
Kalmia carolina	Carolina Laurel
Kalmia latifolia	Mountain Laurel
Kalmia polifolia	Bog Kalmia
Leiophyllum buxifolium	Box Sandmyrtle
Leiophyllum buxifolium var. *hugeri*	Allegheny Sandmyrtle
Leiophyllum buxifolium var. prostratum	Gray Sandmyrtle
Leucothoe fontanesiana	Drooping Leucothoe
Pieris floribunda	Mountain Pieris
Rhododendron carolinianum	Carolina Rhododendron
Rhododendron catawbiense	Catawba Rhododendron
Rhododendron maximum	Rosebay Rhododendron
Rhododendron minus	Piedmont Rhododendron

Deciduous Shrubs

BOTANICAL NAME	COMMON NAME
Aesculus pavia	Red Buckeye
Alnus mitchelliana	American Green Alder
Alnus rugosa	Speckled Alder
Amelanchier sanguinea	Roundleaf Serviceberry
Amelanchier stolonifera	Running Serviceberry
Aronia arbutifolia	Red Chokeberry
Aronia melanocarpa	Black Chokeberry
Callicarpa americana	American Beautyberry
Calycanthus floridus	Common Sweetshrub
Calycanthus floridus var. *glaucus*	Smooth Sweetshrub
Castanea pumila	Allegheny Chinkapin
Ceanothus americanus	New Jersy Tea
Clethra acuminata	Cinnamon Clethra
Clethra alnifolia	Summersweet Clethra
Comptonia peregrina	Sweetfern
Cornus amomum	Silky Dogwood
Cornus asperifolia	Roughleaf Dogwood
Cornus racemosa	Gray Dogwood
Cornus rugosa	Roundleaf Dogwood
Cornus sericea	Redosier Dogwood
Corylus americana	American Filbert
Corylus cornuta	Beaked Filbert
Diervilla sessilifolia	Southern Bush-Honeysuckle
Dirca palustris	Leatherwood
Elliottia racemosa	Georgia Plume
Euonymus americanus	American Euonymus
Euonymus atropurpureus	Eastern Wahoo
Euonymus obovatus	Running Strawberry Bush



Aesculus pavia, Red Buckeye.



Aronia arbutifolia, Red Chokeberry.



Clethra alnifolia, Summersweet Clethra.



Cornus sericea, Redosier Dogwood.



Rhododendron calendulaceum, Flame Azalea.

Gaylussacia baccata	Black Huckleberry
Gaylussacia brachycera	Box Huckleberry
Gaylussacia dumosa	Dwarf Huckleberry
Gaylussacia frondosa	Blue Huckleberry
Gaylussacia ursina	Bear Huckleberry
Hamamelis virginiana	Common Witchhazel
Hypericum buckleyi	Blueridge St. Johnswort
Hypericum densiflorum	Dense St. Johnswort
Hypericum nudiflorum	Early St. Johnswort
Hypericum prolificum	Shrubby St. Johnswort
Ilex laevigata	Smooth Winterberry
Ilex montana	Mountain Holly
Ilex verticillata	Common Winterberry
Leucothoe racemosa	Sweetbells Leucothoe
Leucothoe recurva	Redtwig Leucothoe
Lindera benzoin	Spicebush
Lyonia ligustrina	Maleberry
Menziesia pilosa	Minniebush
Myrica gale	Sweetgale
Nemopanthus mucronatus	Mountain Holly
Philadelphus hirsutus	Hairy Mock Orange
Philadelphus inodorus	Scentless Mock Orange
Physocarpus opulifolius	Common Ninebark
Pieris mariana	Staggerbush
Ptelea trifoliata	Hoptree
Quercus ilicifolia	Bear Oak
Rhododendron arborescens	Sweet Azalea
Rhododendron calendulaceum	Flame Azalea
Rhododendron canescens	Piedmont Azalea
Rhododendron periclymenoides	Pinxterbloom Azalea
Rhododendron vaseyi	Pinkshell Azalea
Rhododendron viscosum	Swamp Azalea

Rhus aromatica	Fragrant Sumac
Rhus copallina	Shining Sumac
Rhus glabra	Smooth Sumac
Rhus typhina	Staghorn Sumac
Robinia hispida	Roseacacia Locust
Robinia hispida var. *kelseyi*	Kelsey's Locust
Robinia hispida var. *rosea*	Bristly Locust
Rosa carolina	Pasture Rose
Rosa palustris	Swamp Rose
Rosa setigera	Climbing Prairie rose
Rosa virginiana	Virginia Rose
Rubus odoratus	Purpleflowering Raspberry
Rubus spp.	Briers (Blackberry, Raspberry, etc)
Salix cordata	Heartleaf Willow
Salix discolor	Pussy Willow
Salix humilis	Prairie Willow
Salix humilis var. *tristis*	Prairie Willow
Salix interior	Sandbar Willow
Salix sericea	Silky Willow
Sambucus canadensis	American Elder
Sambucus pubens	Scarlet Elder
Spiraea alba	White Meadowsweet
Spiraea betulifolia var. *corymbosa*	Shinyleaf Meadowsweet
Spiraea latifolia	Broad-Leaved Meadowsweet
Spiraea tomentosa	Hardhack
Spiraea virginiana	Virginia Meadowsweet
Staphylea trifolia	American Bladdernut
Stewartia malacodendron	Silky Stewartia
Stewartia ovata	Mountain Stewartia
Symphoricarpos orbiculatus	Buckbrush
Symplocos tinctoria	Common Sweetleaf
Vaccinium angustifolium	Lowbush Blueberry



Rhus glabra, Smooth Sumac.



Sambucus canadensis, American Elder.



Stewartia ovata, Mountain Stewartia.

Vaccinium corymbosum	Highbush Blueberry
Vaccinium erythrocarpum	Mountain Cranberry
Vaccinium fuscatum	Black Highbush Blueberry
Vaccinium myrtilloides	Canada Blueberry
Vaccinium pallidum	Blue Ridge Blueberry
Vaccinium stamineum	Deerberry
Vaccinium virgatum	Smallflower Blueberry
Viburnum acerifolium	Mapleleaf Viburnum
Viburnum alnifolium	Hobblebush
Viburnum cassinoides	Witherod Viburnum
Viburnum dentatum	Arrowwood Viburnum
Viburnum dentatum var. *venosum*	Southern Arrowwood
Viburnum lentago	Nannyberry Viburnum
Viburnum nudum	Smooth Witherod
Viburnum prunifolium	Blackhaw Viburnum
Viburnum rufidulum	Rusty Blackhaw
Xanthorhiza simplicissima	Yellowroot

Planting for Rural Character

As you develop an understanding of the Blue Ridge Parkway environment, you will be able to develop landscape designs that reinforce that environment and complement the overall natural theme of the Parkway and of the traditional landscape.

Subdivision planting should make use of existing landform and vegetation to ensure that new plantings become part of the environment and not a prominent feature that detracts from the existing landscape character. New planting should be planned through considering existing vegetation patterns and species. Extend the existing groves or woodlots into your development. Lay out plants to reflect the existing patterns in the landscape. These may be geometric patterns of fields, or curves that follow a swale, or the contours of ridges and gullies.

Horticulturists categorize plants as native, non-native and invasive. The Parkway uses a native plants policy. As the Blue Ridge has a remarkably diverse palette of native plants, this may be best way to go with your landscape. Some homeowners want non-native species, and they need to be careful that the species they choose are not invasive. Like the term suggests, invasive plants will take over your landscape, and escape to bother other neighbors and nature in general. Kudzu, Lespedeza, and some types of bamboo are good examples in the Blue Ridge. A good list of invasives to avoid can be found at: www.invasivespeciesinfo.gov/plants/

Why a Planting Plan is Important

A planting plan helps you make informed decisions when selecting locations for trees. Circles are drawn representing the maturing size of plants (some landscape architects use 2/3 their full size as a rule of thumb). The planting plan lets you properly space proposed plants, and consider microclimatic

Consider the long-term effect of your planting.



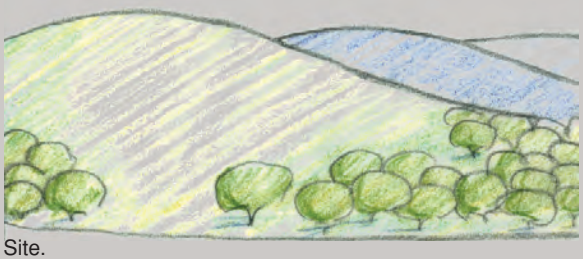
"That oughta do in a few years"



"Perfect"



"It's back there somewhere!"



Site.



Planting not consistent with Parkway.



Planting consistent with Parkway.

affects in relation to existing and proposed facilities. For example, a plant that thrives on the sunny south side of a building may not survive on the north shady side. The planting plan also serves as a record for current and future owners.

Planting Concepts

- Plant in groupings to reflect the vegetation in adjacent properties and open space areas.
- Avoid linear plantings, except to emphasize fence rows in the landscape.
- Consider spring and fall color in the selection of plant materials. Consider plant texture when the plant is not in bloom.
- Create a simple and natural design that blends with the site and surrounding area rather than an elaborate and formal landscape solution.
- Use your landscape plan to address environmental conditions of the site such as controlling erosion, creating shade, preventing light pollution from going off-property or up, and screening back-of-



Use trees with good fall color against evergreens or water to maximize the effect.

house facilities, such as trash can areas, or outdoor storage areas.

- Avoid plantings that would restrict views, require unusual maintenance or interfere with already established native plantings.
- There may be conflicts in environmental responsibility and standard practice manuals. Pay special attention to the aggressiveness of plant species recommended by others. The erosion control mixes specified in erosion control manuals, for example, are highly invasive. They are super-vigorous species meant to spread and curb erosion, not be co-equals to the fragile native plant materials.

Planting for Screening

Some evergreens are particularly good for screening. When considering these uses for plants, keep in mind:

- Screening of development can be achieved while still maintaining distant views across the landscape. Clustering of planting should be used to reduce prominence of buildings rather than block views of the landscape.
- The size of the item that you are trying to screen vs. the mature size of the plant. For example, a 6' white pine may immediately screen a dumpster, but in 20 years it has far outgrown its space, and the dumpster can be seen through the lower tree trunks.
- The installation size of the plant. Particularly with evergreens, a 2" caliper tree will outgrow a 4" caliper tree in a matter of a few years. The large tree experiences a greater planting shock and does not grow for a while, where the smaller tree can shoot ahead.
- The type, size, and location of any existing screening and shading vegetation planned to be removed. Illustrated to the right, in some instances, underplanting with shrubs under the existing trees may be a better choice than removing them and planting with evergreen trees.

Consider options for screening. Adding to and underplanting existing vegetation may be a better choice than a row of evergreens.



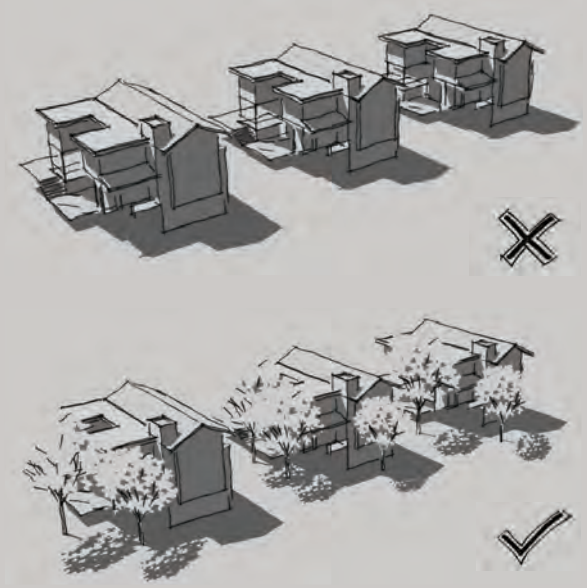
"How do I hide that?"



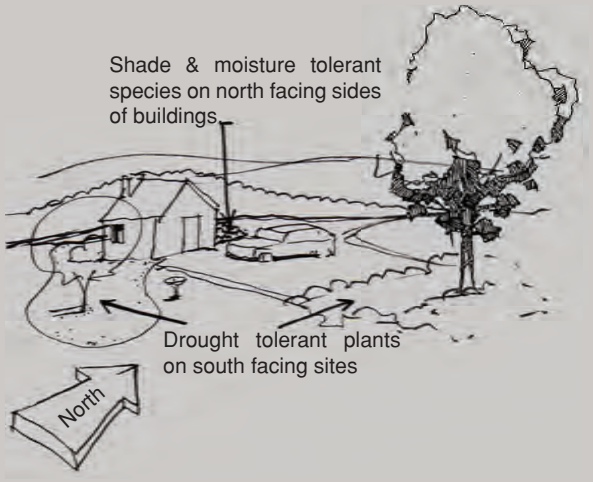
"Just plant evergreens?"



"Supplement existing vegetation"



The landscape breaks down the scale.



Planting for microclimates.

Which Plants to Use

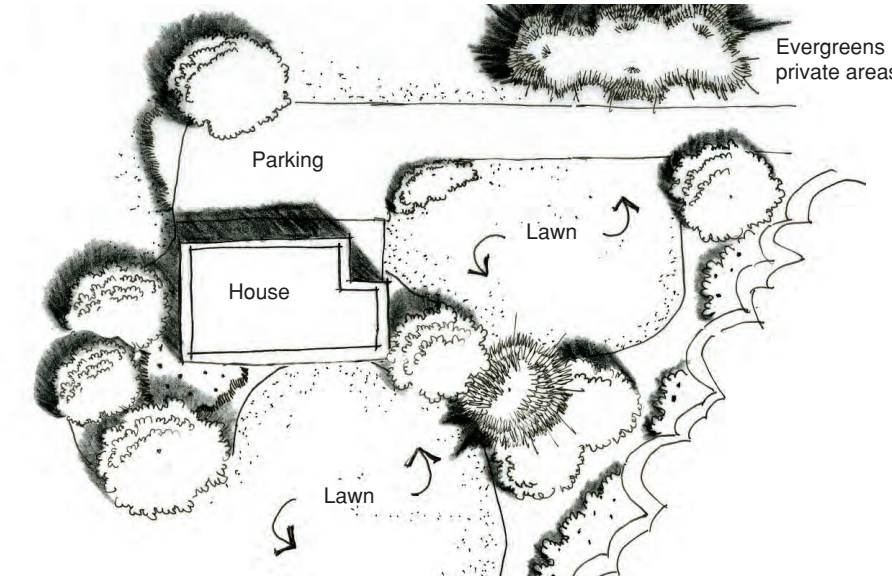
New planting should include trees and shrubs that will thrive in the Blue Ridge and blend with the surroundings. Native plants are recommended because they naturally grow in the existing environment, so they should be easy to grow and keep healthy; and should require less maintenance. One important consideration, however, is a native plant thrives in a native environment. Sometimes the conditions that benefit the plants are so drastically altered by new construction that a native environment no longer exists. In these cases it may be appropriate to plant suitable non-native plants, Other important factors to consider as you develop your planting plan include:

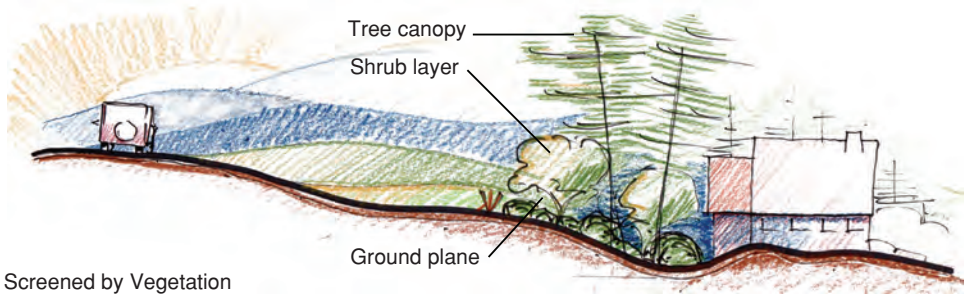
- Different plants will succeed on the east side and west side of the Blue Ridge, because within a few hundred feet there can be very different light, soil, and rain conditions. The recommended plant Palette is a general guideline.
- Illustrated to the left, research your plants to make sure they will thrive in the microclimatic conditions on the southeast slope (sunnier, hotter and drier) vs. the northwest slope (darker, cooler and wetter). south-facing sites may require more drought-tolerant species. Some drought-tolerant species may not perform well on a wet site
- Many exposed sites on the Blue Ridge are windy; new plantings should be planted and staked to withstand wind until they are successfully established. Make sure to select more wind-tolerant species for these locations.
- It is important to consider on-site soil conditions. Ask the local or state conservation agency to identify the soil type as this information will assist in the understanding of plants that grow well in certain soils. Steep sites and ridges require careful selection and location to ensure sufficient pockets of soil are available. Some rocky areas may not allow trees to grow. Your local cooperative extension office can

provide a method for you to test your soil. Test the soil for nutrients, pH, and other factors which will describe best-suited plants, and how to amend the soil for these plants.

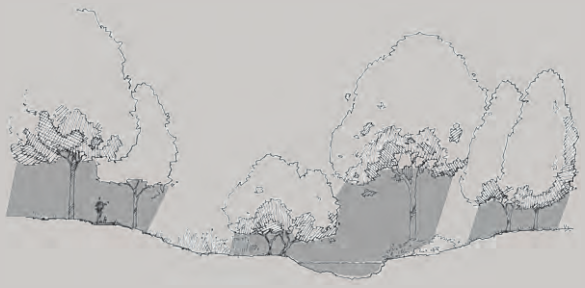
Your Planting Plan

When creating a plan, remember that as they grow the plants will create outdoor rooms. Shown below in plan and in section, the plants occupy a three-dimensional space, transforming the landscape.





Screened by Vegetation



Master light and dark areas in your planting plan.

Chapter 5
Architectural Design

"We are not opposed to development; we are just opposed to bad development"

– J. David Anderson, Parkway Landscape Architect, 2007

Buildings In Character



Mabry Mill as discovered by Ken McCarter in the 1930s. (Blue Ridge Parkway Photographic Archives.)



Same view as above, of the restored Mabry Mill, 2008.

Building structures in character with the Blue Ridge Parkway requires an understanding of the way the Parkway designers design and locate their buildings. To the cinematic landscape architect, buildings can be seen as notes of a scenic score. Like great American landscape painters, early Parkway landscape architects used buildings in the landscape to punctuate scenic spots in the 45 m.p.h. experience. One of the best examples is Mabry Mill.

In the 1930s before conveying the land for the Blue Ridge Parkway to the National Park Service, the Virginia and North Carolina Departments of Highways bought the land and cleared existing structures. The Ed Mabry farm was one of the parcels in the way of the Parkway. When Park landscape architect Ken McCarter first happened upon site, just prior to clearing and demolition, he realized a valuable resource was there in the buildings He convinced his superiors that the buildings should stay, and be rearranged to make the visual composition that we see today. Together the elements of Mabry Mill compose the quintessential American landscape, where buildings

Mabry Mill is such an icon of the scenery that it is co-opted around the world.



Mabry Mill on the cover of a Chinese sketchbook.



A bread wrapper from New Jersey featuring Mabry Mill.



Image of Mabry Mill on a 1960s Massachusetts postcard.

are set in visual harmony as part of a pastoral countryside.

Buildings are beneficial to the Parkway experience when they are appropriately sited, proportioned, and constructed with materials and colors harmonious with the landscape and Parkway building tradition. This chapter discusses how buildings can be fashioned and located to enhance the Blue Ridge Parkway experience.



Mabry Mill: Building in harmony with the pastoral countryside.

Introduction to Mass, Shape and Scale



In 1939, Parkway Landscape Architect Robert G. Hall took this picture to study the shape and scale of the barns in the Blue Ridge landscape. (Blue Ridge Parkway Photographic Archives.)



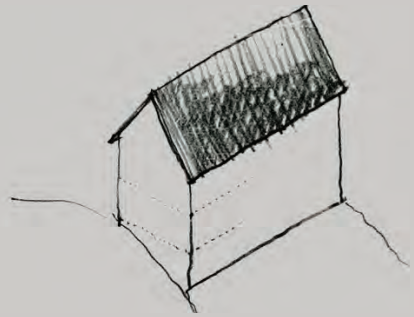
Architect Edward Abbeuhl's Bluffs Coffee Shop, seen here in 1956, bears a striking resemblance to the vernacular mass, shape and scale seen in Hall's barn photograph above. (Blue Ridge Parkway Photographic Archives.)

Architects refer to the **mass** of a building as the perceived size or bulk of the structure.

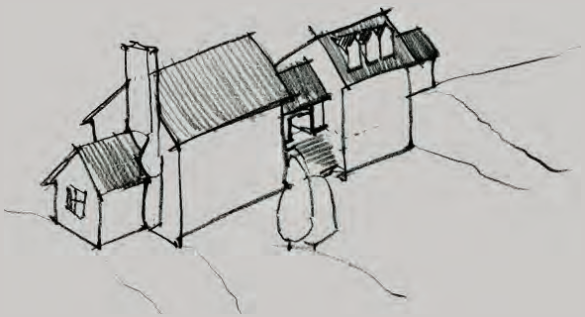
The **shape** of a building refers to its three-dimensional form. The vernacular buildings of the Blue Ridge tend to have simple, square or cubic forms, with gently-sloping roofs.

The **scale** of a building is the relationship of its mass to the other environmental features. A building should not overpower other buildings, nor landscape features within the immediate surroundings, nor should a building appear out of character in the Blue Ridge context.

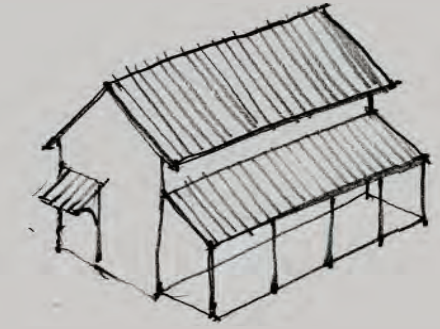
In this chapter, we frequently refer to the mass, shape and scale when describing architectural theme, style and detailing. Designers achieve a sense of appropriate scale by manipulating the mass and shape of their buildings.



Tall unbroken walls grow bigger when placed on topography



Small masses fit onto the topography



Horizontal elements like porches break down the mass and provide interest at a relatively low cost

Employ these guidelines to control the scale of your building in relation to the landscape:

- On slopes, avoid tall unbroken walls by stepping structures with the natural terrain, or breaking the shapes into small masses to fit with the topography.
- On slopes, avoid cantilevered structures with tall supports, which will cast overpowering shadows or show exaggerated profiles.
- Reduce mass with the use of horizontal elements, like porches.
- Reduce the mass of large blank walls by incorporating various rooflines and wall offsets.
- Help fit your building with the scale of surroundings by adding details to blank walls which provide shadow patterns.



The house in this photograph exhibits the largest built *mass* of the farm compound, enhanced by the white fence. The *shape* of the house and barns is simple and square. The *scale* of the buildings is diminished by their placement well below the horizon line. (Blue Ridge Parkway Photographic Archives.)

Architectural Theme


A Highland Resort home.


A building in the Vernacular style.


A Highland Farmhouse.

A critical decision in any development or homebuilding project is the selection of the architectural theme. There are several themes for buildings that will ensure they fit within the Blue Ridge Landscape:

Highland Resort:

Includes Highland Craftsman, Highland Shingle, and Tudor

Vernacular:

Includes Parkway Pioneer Structures, Shed Style and Cabin Style

Highland Farmhouse:

Includes houses as working farmhouses

The Highland Resort, Vernacular and Highland Farmhouse styles are discussed on the following pages.

Elements of Highland Resort Homes



Oversized chimney typical of a Highland Resort structure.



Deep and often low roof overhangs.



Large covered porches and screened porches.

Highland Resort

Particularly noticeable in North Carolina mountain towns like Blowing Rock, Linville and in some Asheville neighborhoods, the Highland Resort style was popular from the 1890s to the 1920s. This was the era when many people escaped the diseases and smoke of the cities of the east coast, to summer in the cool and clean mountain air. The popular Shingle, Craftsman and Tudor styles followed the summer people to the mountains. These styles remain vital and influential.

Highland Resort buildings are characterized by forms that exaggerate climatic adaptation. They sport oversize chimneys, deep and often low overhangs on long porches, screened porches, and other elements that provide a comfortable and close relationship to the outdoors. House design was critical as heating was helped by thermal mass and cooling was achieved by a high level of natural ventilation. These structures achieved comfort: a cool home resulted from careful attention to design, not air conditioning, and a warm home resulted from understanding materials, not heating systems. Houses in these traditions provide a series of rooms that offer a variety of indoor/outdoor space. For example, a house may have a sunny reception lawn, a large covered porch, a screened porch, a sleeping porch, bedrooms with large opening windows, and finally a central living room surrounded by other rooms with fireplaces at each end. Each of these spaces transitions from entirely open outdoors to the enclosed rooms. Indoors, things become more cloistered to retain heat in the colder months.

Although never entirely out of style, there should be renewed interest in the Highland Resort theme in these days of energy consciousness. The physical form of these buildings responds to the sun and the earth, providing simple places for people to enjoy the outdoors.

The Highland Resort theme of housing is all but invisible to the Parkway viewer. Highland Resort homes are nested in the woods, surrounded by dense foliage, and almost never seen.

A typical Highland Resort home is shown below. To the right, in the first column, early Blue Ridge Parkway designers noted several curious local resort details for their emergent Parkway style. The second column denotes typical landscape settings for Highland Resort buildings. In the third column, notice a few elements of the indoor/outdoor relationship, and the far column shows a few details common to Highland Resort houses.



Typical Highland Resort house.

Precedents



Camp Kewanzee Dormitory, 1940. (W.D. Ludgate, 1940. Blue Ridge Parkway Photographic Archives.)



Old Biltmore Forest School buildings. (D.H. Robinson, 1958. Blue Ridge Parkway Photographic Archives.)



Roaring Gap Hotel detail stone work on north wing. (E.H. Abbeuhl, 1935. Blue Ridge Parkway Photographic Archives.)

Landscape Setting



Highland Resort house camouflaged by the landscape.



Highland Resort house immersed in the landscape.



Mature vegetation works well with most of the Highland Resort houses.

Elements of the House



Indoor and outdoor spaces.



Second story shelters the porches.



Stone and shingle building materials.

Details



Brackets and extended eaves.



Gabled porches.



Railings.

Vernacular

Where Highland Resort-themed buildings of the 1930s were designed by professional designers, traditional Vernacular structures tended to be built by local people without formal architectural training. Blue Ridge Vernacular is different from that of the Piedmont or the shore, because mountain needs are different. Blue Ridge Vernacular reflected the needs of farmers and mountain people, often providing ingenious solutions.

The early Blue Ridge Parkway designers were very interested in the designs of the farmers and mountaineers. They chose the Vernacular theme for the Park Service structures that you see along the Blue Ridge Parkway today. Later termed the "pioneer style," these early Vernacular-themed structures of the Blue Ridge Parkway were patterned after the local cabins and barns in the Blue Ridge.



Vernacular cabin/lodge with stone base. (Blue Ridge Parkway Photographic Archives.)



Barns and sheds showing box forms and steep roof pitches. (Robert G. Hall, 1939. Blue Ridge Parkway Photographic Archives.)

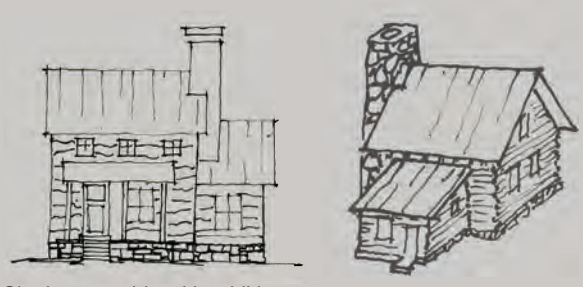


Bluffs Coffee Shop designed with small box forms and steep roof pitches. (Ralph Anderson, 1956. Blue Ridge Parkway Photographic Archives.)



A 1930s Blue Ridge Parkway Vernacular design for a Tea House and Gas Station. Note box forms and steep roofs. (Blue Ridge Parkway Archives.)

Simple Building Blocks of Vernacular style



Single pen cabin with addition.



Two story double pen cabin at Crab Orchard Museum, Tazewell, VA.



Dogtrot cabin at Crab Orchard Museum, Tazewell, VA.

In contrast to the Highland Resort theme, the Vernacular theme is more restrained, and simpler. 1960s and 1970s designers nationwide used some elements of this theme in the "Shed Style." Practiced designers must adopt a rare level of restraint when designing good Vernacular-themed structures. The humble functionality of the original structures can be easily lost by designer enhancements.

The simple log cabin, or stick-built clapboard timber-frame is the basic building block of the Vernacular theme. Referenced as a "pen" by architectural historians, the dominant rectilinear plan conforms to square log joining techniques, and their small size comes from available log and timber sizes. 30' in any direction would be considered a long dimension. Sometimes, multiple pens compose one structure. The double-pen cabin was popular in high reaches, and the dog-trot cabin on lower slopes. The dogtrot cabin, a popular plan for cooling and indoor-outdoor living, features two pens separated by a porch, and sometimes these pens are surrounded by porches. Similar to the Highland Resort building, outdoor-to-indoor spaces are arranged for climate control.



Example of architecturally-designed vernacular house.

Unlike the Highland Resort homes, Vernacular structures may be visible from the Parkway. They are part of the living agrarian landscape. Successful siting of a Vernacular structure requires restraint, and they are best sited in the middleground, with their backs close to and aligned with woodlines, or otherwise partially screened and visually diminished in the landscape setting.

A typical architect-designed Vernacular house is shown below. To the right, four columns show the typical landscape settings, some elements of Vernacular houses, traditional details, and the far column shows how architects have adapted these traditional elements and details with restraint into contemporary Vernacular buildings.



20th century vernacular structure, immersed in woods.

Landscape Setting



Simple, not adorned with shrubbery.



Backed against the woods.



Modern Vernacular immersed in the woods.

Elements of the House



Simple stepdown porch.



Small pens with additions.



Massing uses T or L-shaped wings.

Traditional Details



Clipped notch.



Cock's comb.



Simple, tight eaves.

Modern Adaptations by Architects



Clean roof forms.



Simple box form.



Step-down massing.

Highland Farmhouse

The Highland Farmhouse resembles the other two themes in terms of climate control features. Like Vernacular buildings, they are efficient in material use and demonstrate smaller volumes. However, their appearance significantly departs from the Vernacular. Historically, these houses were designed to convey the occupant's status, and his changed relationship to the landscape as a place to enjoy, rather than a shelter to enable survival. The family farm scene represents the culmination of years of pioneer struggle. With the emergence of the Highland Farmhouse as the focus of the scene, a visual balance between man and the landscape was achieved. The house not only functions as the home and head office, but as an expression of taste, social aspiration, and center for leisure. Farmhouses are often detailed with elements of conventional architectural styles: Victorian, Queen Anne, Colonial, Georgian and sometimes Neoclassical.

Essential to the Highland Farmhouse theme is a house that is part of a working agricultural landscape. Without the barns, fences, paddocks, large surrounding shade trees, spring houses and other outbuildings, these houses look bare and isolated. The Highland Farmhouse story is told by the



Highland Farmhouse. (Ken McCarter, 1940. Blue Ridge Parkway Photographic Archives.)



T-form Highland Farmhouse.

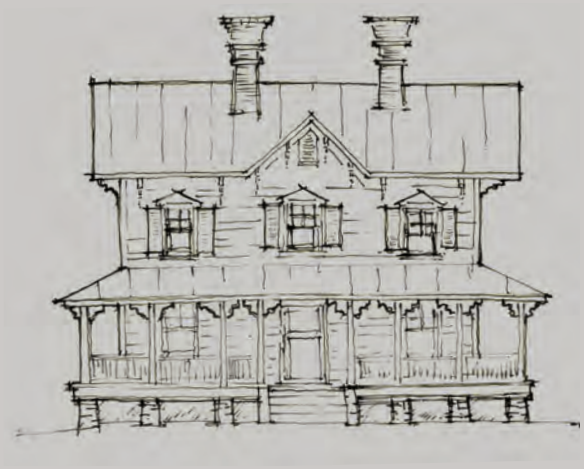


Highland Farmhouse bungalow.



Highland Farmhouse with Highland Resort detailing.

Building Blocks of the Highland Farmhouse

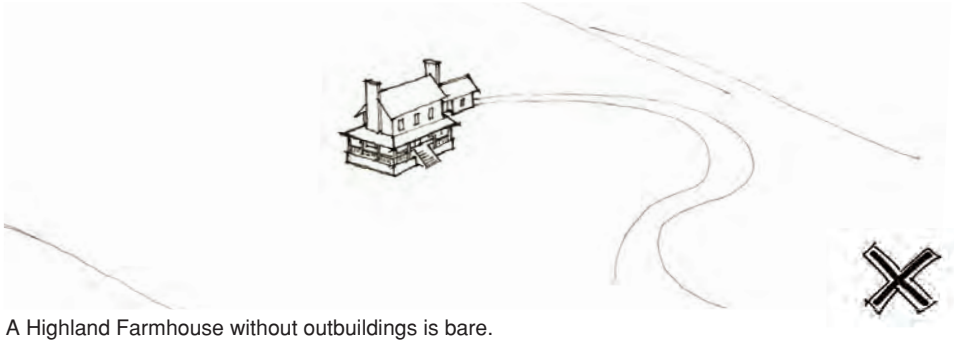


- Frame construction or the appearance of frame construction (sometimes they are covered cabins)
- Central entrance
- Ornate chimneys
- Multiple large windows
- Trim
- Broad porches for summertime leisure

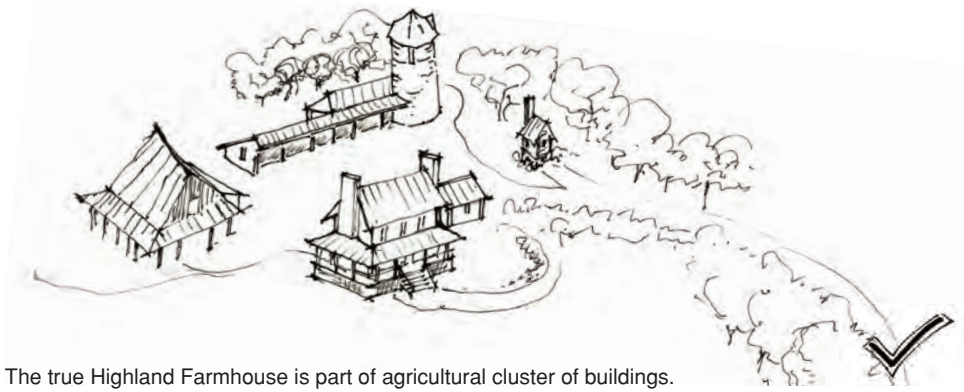


surrounding outbuildings, positioning the house within a cluster of service buildings that are connected by function to the paddocks, pastures, fields, and landscape beyond.

Farmhouses have more in common with the forms, elements and materials of the Highland Resort style houses, than they share with their predecessor Vernacular houses. The difference is that rather than intentionally being nested in nature, Highland Farmhouses try to be distinguished from it. For example in the Highland Farmhouse, smooth cut white painted planking is preferred for siding, as opposed to rustic tree bark siding on the Highland Resort house.



A Highland Farmhouse without outbuildings is bare.



The true Highland Farmhouse is part of agricultural cluster of buildings.

The Highland Farmhouse is the most visible of the three themes of buildings along the Blue Ridge Parkway. Rather than being hidden, like the Highland Resort structure, or tucked back against the woods edge, like the Vernacular structure, the Highland Farmhouse is a highlight in the landscape. This is why a single working farmhouse is occasionally acceptable and dozens of look-alike farmhouses are not acceptable. If you are going to build a single house, on a farm, the Highland Farmhouse may be the right theme. If you are going to build 100 houses in a rather dense cluster, the Highland Resort may be the more appropriate route.

To the right, in the near column, Blue Ridge Parkway photographers document the Highland Farmhouse. The second column shows some typical examples in the landscape. Note knoll positions, and board fences. The third column shows massing elements of the house, and the far column shows typical detailing associated with Highland Farmhouses.



Typical Highland Farmhouse

Precedents



Example of fence and porch at the Sutphin home. (L. Arnberger, 1956. Blue Ridge Parkway Photographic Archives.)



Farm Group. (Ken C. McCarter, 1940. Blue Ridge Parkway Photographic Archives.)



Farm Scene on a knoll against woods. (Abbey Rowe, 1952. Blue Ridge Parkway Photographic Archives.)

Landscape Setting



Knoll against the woods.



Within a cluster of buildings.



"House Seat" knoll along circulation route.

Elements of the House



Horizontal porches and vertical living elements.



Recent example of porch and fence detail.



T-form or I-form additions are common.

Details



Smooth cut painted planking.



Steep-sloping roofs.



Composed ornamental features.

Architectural Styles

After choosing an architectural theme, choose a style of the building as a next step. Within the Highland Resort theme, there are Highland Craftsman, Highland Shingle, and Tudor styles as examples. The other themes have their various styles as well.

For a new building, choose a style particular to your taste. When composing a design for your building, the mass, shape and scale the shape and size, chimney style, porches and roofs, exterior materials, door and window sizes and types, and other elements should all conform to the style you choose. Particularly important is the surrounding environment. Pay special attention to the defining elements and styles of other houses in the neighborhood, as these should influence your choices.

Architectural styles of the Highland Resort theme



Highland Craftsman



Highland Shingle



Tudor

Architectural styles of the Vernacular theme



1930s Blue Ridge Parkway designers' study for a vernacular stone structure. (Blue Ridge Parkway Archives.)

Architectural styles of the Highland Farmhouse theme



Victorian



Log Cabin



Colonial



Shed Style (Washington State Department of Archaeology & Historic Preservation.)



Neo-Classical

These standards will help you choose the appropriate architectural style:

- Use an architectural style to complement the natural setting.
- Use an architectural style that complements the style of nearby buildings. Where no predominant architectural style can be determined, try to use similar building shapes, exterior materials or colors or architectural features such as roofs, windows/doors, etc.
- Architectural styles that were developed for the mountains and their rural or small town character, such as Highland Craftsman are encouraged. Contemporary styles can be adapted to Blue Ridge Parkway character by using these guidelines.
- If you are adding onto a building, make sure the style of your addition resembles the host structure.

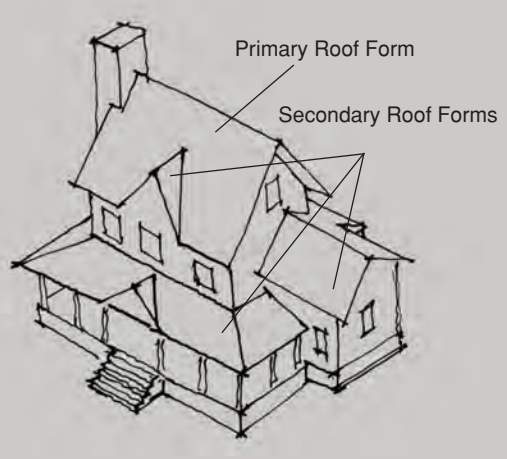
Architectural Features



Roof Form in one large form.



Roof form composed of small forms.

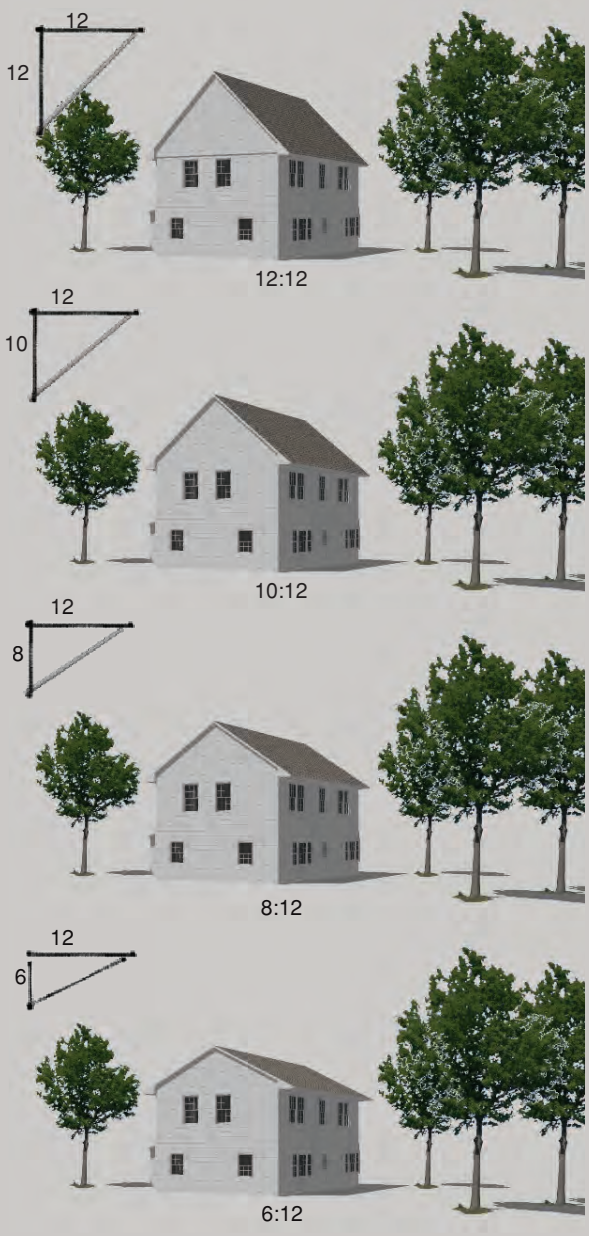


Like architectural style, features can affect whether a building appears to be compatible with its surroundings. Architectural features are pieces of the building. They are the volumes of the building, such as porches, garages, porticos, and other components of the massing, down to the architectural details, such as window, door, and garage door types. Prominent features are discussed below.

Roof Form

The Parkway traveler sees a lot of roofs below. Selection of your roof forms will be one of the most influential decisions you can make on lasting visual quality for the Parkway visitor. Roofs are also a major visual element when buildings rise above treelines or ridge lines. Roof pitch is the measure of rise to run, commonly expressed to 12. For example a 12:12 slope rises a foot for every foot it expands horizontally. A 6:12 pitch is half as steep. Pitch helps determine mass and scale of your roof, and varies with theme.

Roof Pitches



Below are some general roof planning guidelines, followed by more specific guidelines within each theme:

- Your roof contributes to your neighborhood. In a grouping of buildings, roof patterns are created by repetitive roof slope, materials and massing. Evaluate the pattern of roofs in the surrounding environment. Some neighborhoods have roof patterns that are distinctive and repeatable from home to home. Other neighborhoods have a greater variety of types, or less-distinctive roof patterns, allowing greater variety in your choice.

- The mass and the shapes of your roof contribute to the character of your building. Most houses have a primary roof form and smaller, secondary forms that contribute to the interest of the house. Evaluate the massing of the roof and determine how it will benefit the appearance of the building and be visually compatible with the surroundings.

- When planning a new building or addition, begin with a primary roof form. Consider additions to the primary roof such as secondary roof forms at a lower slope, or dormers that may serve to reduce the building's apparent mass and scale. These also provide visual interest, as the sun moves during the day.



From the Blue Ridge Parkway, your roof may be the most visible component of your house.

If there is an established architectural style of roofs in a neighborhood, roof shape and types should be compatible with existing roofs. If there is not an established roof style, consider these guidelines:

Highland Resort homes should feature roofs with these characteristics:

- Gable roofs are preferred, with some clipped gables and hip roof forms.
- Preferred pitches are 5:12 and steeper.
- When on level terrain, generous, even oversize roof overhangs are encouraged.

Vernacular homes should feature roofs with these characteristics:

- Gable roofs are preferred, with shed-style porches or additions.
- Preferred pitch is 6:12.
- Porch roofs can slope less than, or have the same pitch as the primary roof.
- Modest roof overhangs are encouraged.

Highland Farmhouse homes should feature roofs with these characteristics:

- Gable roofs are preferred, with shed-style porches or additions.
- Preferred pitches for the main roof are 6:12, up to 12:12
- Porch roofs should provide additional expression of elements, such as wraparounds or turrets.
- Generous, bracketed or decorative roof overhangs are encouraged.



Gable Roof



Clipped Gable Roof



Hip Roof



Shed Roof and Gable Roof



Gambrel Roof

Roofs to avoid:

- Flat, gambrel, or single plane pitched roofs as the primary roof.
- Steep gable roofs like the “Swiss Chalet.” Any roof over 12:12 is too steep to fit the Blue Ridge landscape.
- Massive single-gable roofs. Instead, break the mass of one gable roof into several gable roofs, as seen in the examples on page 5-21.



Rooftop scene from the Blue Ridge Parkway.

Roof Materials

The materials of the roof contribute significantly to the character of the traditional architecture of the Blue Ridge Parkway. They are often the most visually dominant element of buildings. Historically, the materials for roofs in the 19th and early 20th century were split wood shakes. In the early 20th century, metal roofs were used, which fade to a rust color.

Today, there are a variety of new roofing materials available, many of which are more sustainable and fire resistant than the older roofing materials. It is important to understand that our objective is to blend roofs into the Parkway landscape, so they appear harmonious with the natural or traditional landscape texture and colors. It is easy to select a suitable roofing material from the vast array available in today's contemporary market that will have minimal visual impact when seen from the Parkway.

Highland Resort homes should feature roofs of these materials:

- Wood shakes, wood shingles, or simulated shakes that are allowed to weather naturally.
- Treated wood shingles or shakes which have a natural gray, grayish or brownish color.
- Slate shingles or slate-like shingles, dark gray in color.

Vernacular homes should feature roofs with these materials:

- Wood shakes or wood shingles that are allowed to weather naturally.
- Treated wood shingles or shakes which have a natural gray, grayish or brownish color.
- Seamed non-reflective metal, dark gray, rust, or brownish in color.


Metal roof showing aged patina.


Textured asphalt singles.


Wood shakes.



Wood shakes.



Porcelain, top coated metal.



Complement your trim color with roof color.

- Textured asphaltic shingles with dark gray or dark brown pebble finish.

Highland Farmhouse homes should feature roofs with these materials:

- Seamed non-reflective or low-reflective metal, dark gray, rust, or brownish in color.
- Textured fiberglass or asphaltic shingles with dark gray or dark brown pebble finish.
- Seamed copper roofs that are allowed to weather naturally.

Also keep in mind:

- Roof vents, metal chimneys, metal chimney caps and plumbing vents should match the color of the roof, or should be black, dark gray, or bronze in color.
- Skylights should have black, bronze, or gray trim.
- The trim should match or closely complement the roof color. Gutters, downspouts, vent pipes, flashing and ridge caps should all be consistent in color and texture with the roof.

What about new High Tech roofing?

New roofing products can be desirable due to their long life, fire safety, and low maintenance. Sometimes these roofs also reflect light and are difficult to shade completely throughout the day, increasing their visibility from, and impact on the Parkway. Potentially acceptable newer roofing systems options include:

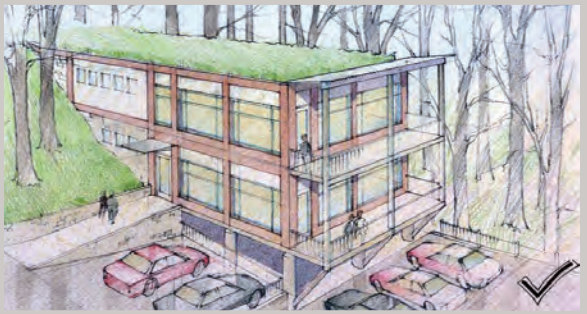
- Green design techniques, such as new solar shingles, are encouraged when they meet color and texture objectives. The downside of many solar shingles is that they are highly reflective.
- Green design techniques, such as a living roof.
- Metal shingles, with a factory textured or granular finish, similar to fiberglass asphalt shingles.
- Stone or porcelain top-coated metal shingle systems – these are typically tile or slate look-alikes made in panels or individual metal shingles.
- Pre-weathered or oxidized metals – depending on the finish, a weathered metal can have low reflectivity.
- Asphalt or fiberglass coating on metal that can result in a rubberized texture. Dark colors are available.

Roofing that is Not Acceptable

Reflective roofing that features smooth metal (sheet or standing seam), smooth metal tile simulations (no top coating), or mill coated metal that is shiny is not acceptable.



Solar shingles. (Atlantis Energy.)



A green living roof.



Avoid reflective metals.



Architect Edward Abbeuhl, in 1935, studies a stone chimney as a Parkway precedent. (Blue Ridge Parkway Photographic Archives.)



Stone chimney with matching chimney cap.



Articulated facade: note it is a composition of small forms.

Chimneys

Stone chimneys are most compatible with the Parkway's character. They should be of native stone, dark gray or earth-tone stone, with matching chimney caps. Chimney texture and stonework should match the foundation of the house. Use a dark or natural gray mortar and stone patterns discussed in the stone section.

Façades

To provide visual interest to the vertical surfaces of your building, articulate vertical planes of façades with wall gaps. Even small changes to lengthy blank walls can improve the scale and apparent building mass. Long flat walls generally appear more massive and less interesting. Providing shadow lines, steps, and punching openings to long or tall walls will reduce apparent mass and add visual interest. In some themes, changes in building materials or colors and expressive architectural details can prevent a building from appearing massive or boxy. For example, in the Tudor house example to the left, forms jump forward to prevent an ordinary box mass. This is further articulated by the large outdoor porch.

All of the exterior elevations of the structures should provide interest and relief and utilize architectural massing and detailing, recessed windows, overhanging eaves, and feature front-facing porches or terraces. Repetitious elevations should be avoided.

Façade Materials

Façade materials will vary greatly depending on the theme that is chosen for the building.

Highland Resort

The Highland Resort theme utilizes a number of materials that complement the environment, but may be adaptations from outside the area and in cases like Tudor style – from outside the country. They may use very clever adaptations of very local products – like bark siding, or free-edge siding, that are found few places except in the mountains. Highland Resort buildings feature a complex mixture of materials, which have historically been composed by professional designers; it may be best left to them to come up with your materials palette.

Highland Resort Building Materials:

- Shingle wood siding (stained)
- Live-edge wood siding, also called Adirondack or Waney edge siding (natural or stained)
- Clapboard wood siding (stained)
- Bark shingle siding (natural)
- Natural weathered, or grey logs
- Native stone with gray or dark mortar


Bark shingle siding.


Live-edge wood siding. (Maine Timber Works.)


Native stone with dark mortar.



Board and batten siding.



Clapboard wood siding.



Tongue and groove vertical siding.

Vernacular

Vernacular design means created with local materials and methods. Of the three themes, this is the one that is most closely linked to Parkway design history. The original pioneer structures along the Parkway were made from the native materials such as stone and wood. American Chestnut, local Maples and Oaks were typical materials used to construct log cabins and barns. Stone was used for foundations and chimneys. In the early nineteenth century through the 1930s, paints and stains not extensively used in the mountains. In the mid-1930s, when construction of the Parkway began, the National Park Service designers decided that the natural weathering gray color of the indigenous buildings would provide the basis for the materials and color theme of the Blue Ridge Parkway. Accordingly, the weathered gray log and board structures with stone foundations were adopted as the material and color choices for the Parkway buildings.

Vernacular Building Materials:

- Vertical board and batten wood siding (stained)
- Vertical board on board wood siding (stained)
- Clapboard wood siding (stained)
- Tongue and groove wood siding (stained)
- Shiplap wood siding (stained)
- Wood shingles
- Natural weathered, or grey logs
- Native stone with gray or dark mortar

Early Experiments in Vernacular Design

Shown below and on page 5.31, chief landscape architect Stanley Abbott and architect Haussmann explore several variations for structures appropriate for their new Vernacular style for Parkway buildings. Completed in 1936, Haussmann's elevation of a typical gas station and comfort station (below) uses native stone on the left end and logs on the right. Abbott's perspective for a typical gas station and comfort station on page 5.31 demonstrates use of the clapboard wood siding, and a large covered porch.



Early experiments in vernacular design were used on this CCC camp structure built near Rocky Knob. This building exhibits a native stone chimney, clapboard siding, and a shake roof.



Gas and comfort station designed in the Vernacular style. (Blue Ridge Parkway Archives.)



Gas and comfort station designed in the Vernacular style. (Blue Ridge Parkway Archives.)

Highland Farmhouse

By the time the Parkway was under construction, the Victorian style of building had reached every corner of the United States. Lumber mills had also reached the mountains, and siding was available to most people. The farmhouse became the first candidate for farm buildings to be sided, and many can be found sided right over the original cabin beneath. Others were built as frame construction. For a brief period, a new hybrid structure happened in the mountains; some early 20th century log cabins are joined in a way that looks very conducive to lap siding being added later. Although many farmhouses may have been painted bright Victorian colors originally, by the 1930s they were predominantly white or off-white. Foundations were similar to those on the Vernacular styles, though not as readily visible.

Farmhouse Building Materials:

- Clapboard wood siding (painted or stained)
- Tongue and groove vertical wood siding (painted or stained)
- Shiplap vertical wood siding (painted or stained)
- Native stones with gray or dark mortar

Other Acceptable Materials:

- Synthetic or simulated composite building products that approximate the wood patterns described above. These include concrete board or composite clapboard (shaped like clapboard).
- Clapboard patterns
- Gray or dark-colored brick with gray or dark-colored mortar
- Board plank siding (mill cut, board and batten, V-groove, channel, shiplap, etc.)



Painted clapboard siding.



Shiplap wood siding.



Stone foundation walls.



Synthetic wood siding.



Hardie Plank synthetic siding. (James Hardie.)



Dark colored brick.

Building materials that are not acceptable for buildings within view of the Parkway

- Brick that is bright red, orange-red, pink, light red, white or other colors which would be visually out of character with the traditional architecture.
- Reflective metal siding that is exposed, galvanized, aluminum or other shiny materials including aluminum shingles or siding, enamel or steel siding.
- Siding that is pink, bright silver, red, bright green or blue or generally, colors that would draw attention or be otherwise visually out of character with the Parkway.
- Non-painted, painted, tile-faced or ceramic- faced concrete masonry units (CMUs).
- Varnished, epoxy-finished or otherwise shiny or orange-toned log structures.
- White mortar, white trim on windows and doors.
- Exposed concrete or concrete foundations pargeted with cementitious or stucco materials.
- Pargeted wall caps.
- Rough textured stucco, concrete, or plywood or imitation stucco.

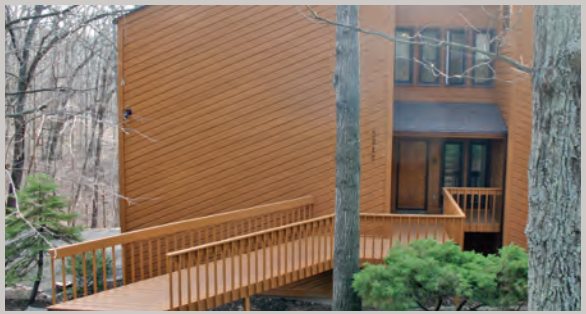
Entries

The entry to the house is an experience for the visitor. Good design provides a visually pleasant transition from the car, to the walk, to visible steps and finally under protection from the rain and wind – the front door. Front walkways, front porches, front doors and windows that face the street make for safer neighborhoods by keeping "eyes on the street." The design and prominence of entries should be considered.

Front porches are a standard for highland living. They should be distinguished from the back porch. With a very favorable climate in the summer, the front porch is an extension of the house, and very often well-designed front porches are centers for daytime and evening activity. Front porches are appropriate for many types of buildings. They call attention to the front door in institutional and commercial properties. They act as the host welcoming visitor into the entry sequence of a highland building.



Highland Resort porch: Sheltered and cool.



Clever Vernacular entrance: Bridge through the trees.



Farmhouse front porch: Center for activity.



Windows punctuate the facade.



Windows break up vertical mass.



Window and door rhythm.

Windows and Doors

Second only to roof patterns, windows and doors are often visually distinctive features on a building. Allowing daylight in and views to the outside, they also create an architectural rhythm on the façade, which affects the apparent mass of the house. When designing and placing windows and doors, consider their location, size and proportions and how they may relate to adjacent buildings. Consider the privacy of neighbors and Parkway visitors, as well as the privacy of the occupants. Consider different times of the day. Particularly at sunrise and sunset, poorly-sited or detailed windows and glass doors can be highly reflective nuisance to Parkway visitors.

Highland Resort homes should feature windows with these characteristics:

- Bright or dark trimmed casement or double-hung, in the same plane as the façade.
- Vertical in or square in orientation, multiple shapes of windows are sometimes desired.
- Wood or metal clad, with dark trim to match the house.

Vernacular homes should feature windows with these characteristics:

- Dark trimmed double-hung, recessed or in the same plane as the façade.
- Square, horizontal or vertical in orientation.
- Wood or metal clad, with dark trim to match or complement the house.

Highland Farmhouse homes should feature windows with these characteristics:

- A detectable rhythm, including standard and special purpose windows, or special clusters to fit with building forms.
- Double-hung, at the facade plane, or projecting, such as a bay or bow window.
- Vertical in orientation.
- Wood or metal clad, with light trim, or trim complementary to the house trim package.

Precedents



Highland Resort windows at the Biltmore Forest school. (Blue Ridge Parkway Photographic Archives.)



Vernacular Puckett Cabin exhibits paned windows. (Blue Ridge Parkway Photographic Archives.)



1953 photo of Sutphin Farmhouse showing door and window rhythm. (Blue Ridge Parkway Photographic Archives.)

Highland Resort Windows



Brightly-trimmed vertical windows.

Vernacular Windows



Trimmed and recessed.

Highland Farmhouse Windows



Theme and variation.



Colorfully-trimmed windows at resort church.



Horizontal orientation in clerestory.



Bay window.



Metal clad windows with complementary trim.



Vertical casement windows.



Complementary trim.

Doors

A friendly, modest front door is a hallmark of the highlands. In the three themes, the doors take different forms, but in every case they extend the hospitality of the host. Front doors should be covered from the weather. Additionally, they should have a glass panel either in the door or as a sidelight, to extend the greeting process. In houses, it is important to design the front entry on a scale compatible with the other features of the house, to maintain a residential rather than institutional or commercial appearance. Public buildings and churches often supplement calling attention to the front door by roof forms, or a tower, or other means.

Highland Resort homes should feature doors with these characteristics:

- The front door is significantly sheltered by a portico, porch or wing of the house.
- Doors should be dark in color, or colorful if shaded, with glass incorporated into the door.
- The principal material should be wood, with dark trim to match the house.

Vernacular homes should feature doors with these characteristics:

- The front door should be sheltered with a portico, front porch or simple shed roof.
- The principal material should be wood, stained or painted to match trim package.

Highland Farmhouse homes should feature doors with these characteristics:

- The front door should be sheltered on the front porch.
- The principal color should be dark or painted to match the trim package, with glass incorporated into the door.
- Decorative sidelights frequently accompany the front door.

Highland Resort Entrances



Gabled porch.

Vernacular Entrances



Simple shed roof.

Highland Farmhouse Entrances



Front porch.



Porte cochere calls attention to entrance at lodge.



Sheltered with a portico.



Glass incorporated into the door.



Sidelight panels.



Projected on public building to denote entrance.



Decorative sidelights.

Glass

Glass in doors and windows must be very carefully considered, as it may cause undue glare, if it is inappropriately shaded or screened. Avoid unscreened glass seen from the Parkway, by topography, plants, or other means. Since glass is smooth, it is more reflective and uniform in appearance than other exterior building materials. Partially or fully screened glass has little or no visual impact.


Use topography or vegetation to screen large areas of glass.

The best way to prevent glare is to have the glass shaded. Large expanses of continuous glass can offer the people in the building the generous rural view shared by the Parkway. Pay special attention to large expanses of continuous or large-paned glass, so it neither glares onto the Parkway, or at night shows all of the indoor activities that would be better screened.

In some scenic areas, guidelines are written prohibiting single panes larger than 50 square feet. The total amount of unscreened glass appropriate for a structure depends on many factors. Keep in mind these general criteria:

- Use topography, vegetation, and wings or façade modulation to screen large areas of continuous glass.
- Mix glass with heavily textured materials, for façade interest.
- Use deep eaves to shade your walls and glass.
- Reduce the amount of glass that faces the Blue Ridge Parkway.
- Use low-reflective glass.
- Give special attention to south-facing windows, as they will cause increased glare.
- Consider the light that will leak out of your house at night. Provide blinds or curtains to minimize light pollution of the sky and onto the landscape.


Use deep eaves to shade walls and glass.



Tinted thermal pane.



Clear thermal pane.



This photo, taken at sunset, demonstrates how mirrored reflective glass (reflectivity > 15%) reflects the sunset into motorists' eyes. There are no lights on in the house.

Glass Colors and Tints

Glass surfaces are one of the places your building will lose the most energy. Glass retains energy in two general ways. First, it has some capability to retain energy in your building, measured by the "e" scale. Low numbers are best. Secondly, glass can reflect energy, keeping sunlight from being absorbed. This second method can be problematic, since reflective glass causes glare, compromising the visitor experience.

Recommended:

- Tinted thermal pane glass, of a grey, gray-green or bronze color featuring low "e" characteristics. Use glass featuring less than 11% exterior visible light reflectivity rating.

Acceptable:

- Clear thermal pane glass, featuring low "e" characteristics (11% - 15% exterior visible light reflectivity rating).

Not Acceptable:

- Mirrored or reflective glass should not be proposed, such as solar cool grey or solar cool bronze glass with greater than 15% exterior visible light reflectivity rating.

Garages

The location, size, position and appearance of a garage can have a great effect on the appearance of a home and should be designed with care. Many garages can be handsome additions to the house compound, and can be an especially important component of the Vernacular and Highland Farmhouse themes. In most cases it is preferable to emphasize the front entrance of home, rather than the garage, a prominent garage may be unavoidable, particularly on steeply sloping lots. In some neighborhoods, there may be an established pattern in the size, position or appearance of garages. In every case, the door of the garage should not face the Blue Ridge Parkway.

Examples creativity with garages can occur with choice of door style, with or multiple garage doors, and with garage orientation. Varying-size garage doors can also provide interest.

Recommendations:

- Avoid making the garage the dominant feature as seen from the street, or from the Parkway. Where it is unavoidable, for example on steeply sloping lots, pay special attention to garage appearance by getting creative with doors and articulating the garage façade.
- A front-facing porch provides friendly relationship to the street. A garage should be behind the porch and around to the side.
- If the garage must be up-front, the front elevation should prominently feature a people-oriented entrance with the garage area not to exceed 25% of the facade.
- Detached garages and side entry garages shall be encouraged. Make them appear as a member of a family of other outbuildings (barns, corn cribs , etc.).



Garage door faces Parkway, dominates view of home.



Garage door out of Parkway view.



Highland Resort and Vernacular houses match outbuildings in form and color.



Highland Farmhouse contrasts with outbuildings, while the outbuildings all match each other in style and color.



Farmhouse is usually out front with accessory structures behind.

Other Accessory Structures

There is a long tradition of siting the house with a number of accessory structures. Over time, the traditional Blue Ridge house develops into a compound of buildings. Integrate accessory structures with the natural terrain and vegetation of the site. Also integrate accessory structures and additions with existing buildings by using similar forms, colors and materials. Consider these additional guidelines:

- Outbuildings, storage sheds, garages and other secondary structures should match the theme of the main house. If the theme is either Highland Resort or Vernacular, they should match the color, texture and material of the main house. If the theme is farmhouse, then they should be a different color from the main house, but should match each other.
- Plan and build screened, fenced or buffered compounds for the storage of recreation vehicles, motor boats on trailers and other such auxiliary vehicles common to today's modern living. These can resemble barns.
- Greenhouses should be oriented away from the Parkway and be fabricated with gray, bronze, black or other dark trim. White and shiny aluminum is not desired.
- Awnings should be minimized. When used, keep to natural fabrics and dark earth colors. White, striped patterns and colors that attract attention should be avoided.

Color

One of the most visible decisions you will make when building along the Parkway is choosing a color or series of colors for a structure. For each of the three themes, there comes a heritage of colors that is repeatedly chosen. The following pages contain this heritage range of colors which is appropriate for structures adjacent to the Parkway. Within the 472 miles of mountain ranges the Parkway travels, there are changes in the colors of exposed rock outcroppings, the famous Blue Ridge haze, and the surrounding vegetation. So, the principle colors have been adjusted to the distinctive regions of the Parkway.

One of the most interesting attributes of the Blue Ridge is the different colors the mountains exhibit during the seasons. Each season is about equal length. Fall is the most pronounced season, with an array of color that spans the rainbow. Other colors are distinctive during different seasons. For this reason we developed the Blue Ridge Parkway trim palette. These colors may accent parts of your house, but they are too intense to use as a primary color.



Single building provides color highlight.



Cluster of buildings enhances color in the scene.

Once you find a suitable house color, consider accents with a complementary trim color. Trim colors should be used in moderation, as they are special accents that will dominate a scene if applied too liberally.

There is a vast difference in colors seen on home computer screens or printers. So, all palettes are shown with Red-Green-Blue numbers that can be matched with a sample at your hardware store.

Montebello



The Montebello palette is developed for buildings along the northern end of the Parkway to help blend them into the landscape. It is the most deeply intense of the Parkway palettes. Modeled on the deep green bedrock featured prominently on Afton Mountain milepost 0 down to the James River milepost 60, the palette also repeats its intensely deep colors in the Balsams and Pisgah Range of North Carolina around Mt. Mitchell (MP 300 thru 380). This palette will work well for Highland Resort and some Vernacular structures. Key to the success of this palette is building location. If the building will be out in the open, these colors will be too intense, will cause the structure to stand out, and become too warm in the summer. If the building is in the woods, covered by summertime shade, the dark colors will help to immerse it into the landscape.



Skylark RGB: 58/56/50



Pine Trunk RGB: 58/65/47



Chestnut Oak RGB: 52/49/36



Jackson RGB: 43/51/41



Barn Plank RGB: 93/104/61



Afton RGB: 54/70/61

Linville



The remarkable collection of buildings in Linville provides the basis for this palette. Lighter in hue than the Montebello colors, this palette will work well with either the Highland Resort or Vernacular buildings. The palette also features a greater range than Montebello. The Limestone, River Stone and Retreat colors perform well in more sunny environments. This palette works well in paint, and particularly well in stains. These colors can be mixed in semi-opaque and semi-transparent stains, bringing out the natural color and texture of the wood to combine with these nature-based colors. Considered the “workhorse” palette for the Parkway, the Linville palette will also work for larger, industrial buildings in the middleground and background landscape, as well as for subdivisions.


Shingle RGB: 96/86/80


Esceola RGB: 82/76/50


Retreat RGB: 103/104/96


Riverstone RGB: 164/148/126


Limestone RGB: 166/160/154


Squirrel RGB: 108/98/68


Spruce Pine RGB: 24/40/25

Homeplace



This palette was developed from the farmhouses that align Parkway through the highland plateau south of Roanoke to the North Carolina Border (milepost 128 – 218). The off-white colors are meant to emphasize Highland Farmhouse buildings and structures in the landscape. They should be used only for true farmhouses and their dependencies, when designed in the Highland Farmhouse theme. These may be applied as a whitewash or a semi-transparent stain, particularly on auxiliary structures, and will grow more graceful with fading.

Tin Roof RGG: 233/239/241

Farmhouse RGB: 245/248/249

Tin Roof II RGB: 203/203/203

Barn Board RGB: 223/223/223

Whitewash RGB: 199/199/183

Springhouse 212/205/186

The Trim Palettes

The Plateau and Rock Castle Gorge trim palettes developed to reflect colors seen during the highest tourist seasons on the Parkway. The Plateau palette features colors that are prevalent in summer months. Rock Castle Gorge consists of fall colors.

Use the trim palette to find a complementary color for the main house color palettes. Trim colors should be used in **moderation**, as they are special accents that will dominate a scene if applied too liberally.

The Plateau Trim Palette



Shown to the right, this palette features colors that are prevalent in the summer.



Tulip Tree RGB 89/127/139



Wet Bark RGB: 20/32/49



Plowed Field RGB: 141/140/134



Sunny Till RGB: 171/155/125



Mowed Shoulder RGB: 59/96/78



Old Post RGB: 66/76/88

The Rock Castle Gorge Trim Palette



This palette features colors that are prevalent in the fall.

Frosted Field RGB: 168/181/164

Poplar Gold RGB: 204/179/107

Late Leaf RGB: 119/127/72

Snake Fence RGB: 199/186/171

Osage RGB: 199/159/121

Broom Sedge RGB: 185/176/146

Shady Branch RGB: 46/45/56

Sunny Twig RGB: 254/240/221

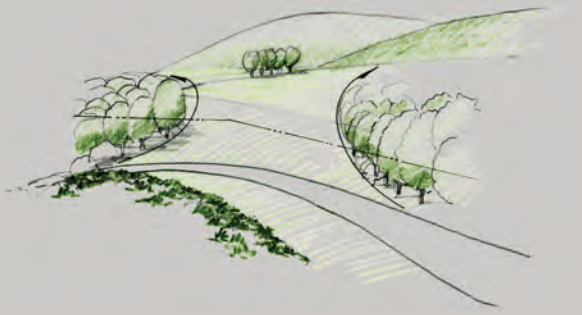
Chapter 6
Living by the Parkway

Being a Good Neighbor

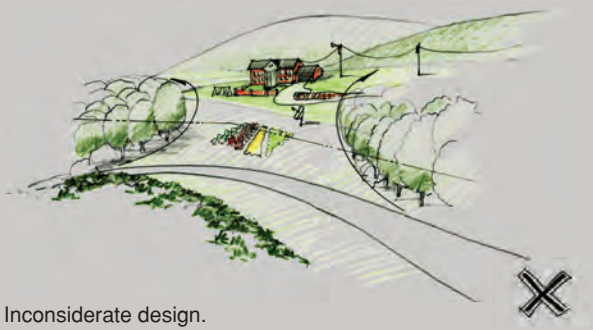
The Blue Ridge Parkway may be the most demanding, yet rewarding, neighbor you may have. With a border larger than most nations, and with more visitors than Yellowstone, Yosemite and the Great Smoky Mountains National Parks combined, it is sure a big neighbor! The chance to live with the adjacent serene setting for relaxation, contemplation or scenery is maybe why you bought your property or are reading this book. Living by the Parkway presents its own unique challenges and benefits. The Parkway won't be stopping by to borrow a cup of sugar. It does, however, have other favors to ask of its neighbors. A healthy Parkway ensures 20 million visitors will return each year, maintaining this remarkable economic engine for the Blue Ridge. With so many eyes passing every year, it is wise to keep the neighborhood looking its best!

Considerate Design

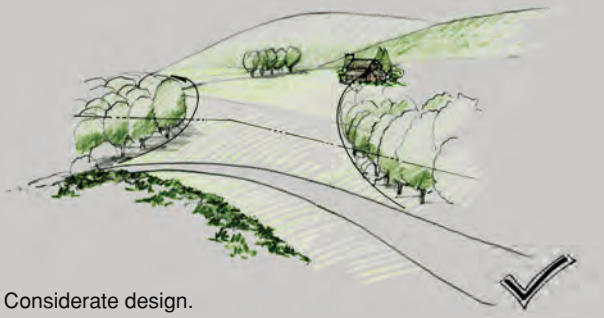
The sketches below illustrate a conceptual design that is inconsiderate of a Parkway traveler, and another on the same land that is considerate of these guests, by employing the techniques of Chapters 2 through 5. This is investigated in greater detail in illustrations on pages 6.6 and 6.7.



Existing conditions.



Inconsiderate design.



Considerate design.

"But it's my property and I can do as I please!" Of course it is. The recommendations contained within this book are to keep both your views and the long-traveled visitors' views beautiful and worth every cent invested. There are several maintenance needs that your Parkway neighbor requests from you. These include managing your plants and animals, dealing with borders - both seen and unseen, and resisting the temptation to let your projects cross the border onto the Park.

Managing Your Plants and Animals

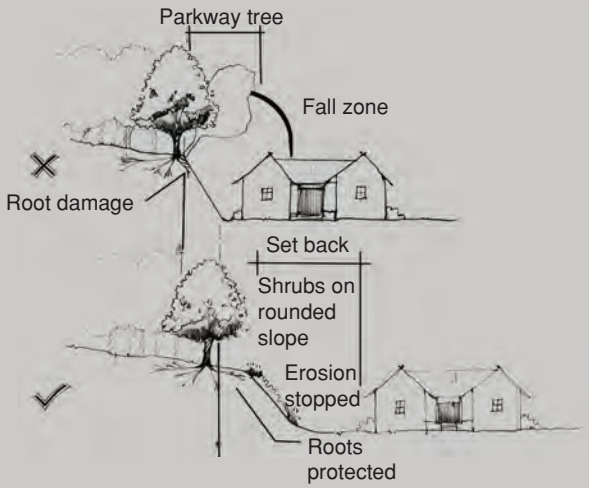
Managing your property's flora is the keystone of living harmoniously along and with the Parkway. The major concern would be native versus non-native plant species. Planting locally native species on your property helps us in preventing eco-disaster in the Park. The American Chestnut Blight of the early 20th Century, the Kudzu explosion in the South, and European Starlings are all examples of non-native species being introduced into this continent with irreversible consequences. The once widespread, strong and tall American Chestnut was nearly wiped out by a blight thought to originate in imported Asian lumber; work continues today to reestablish a blight-resistant chestnut into their once native forests. Kudzu was introduced as erosion control from Japan with great enthusiasm. Shortly after exposure to the much hotter and wetter American South, the kudzu plant was seen as too fast growing and declared an invasive weed. The European Starling was introduced in the late 19th Century and has spread to cover much of the US. The Starling is a particularly nasty bird in that it lays its eggs in other birds' nests and with larger young ensures the surrogate mother will care for the alien birds while letting its own, native young die. These extreme cases were all unanticipated consequences of people playing with non-natives;

the risk remains that seeds from a non-native plant can spread seeds with winds, water or animal locomotion and may just find its new favorite home by crowding out a well-adjusted native plant.

Borders - Seen and Unseen

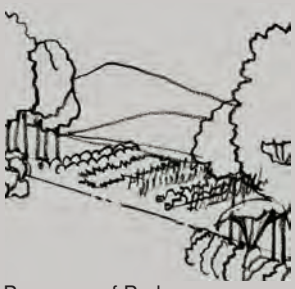
On terrible occasions of forest fires, it is nice to have done something before hand to protect your land and your investments. Building close to the forest can be dangerous in case of fire. A setback from existing forests can save lives, your investment and give fire fighters time to control the blaze. The distance the home should be from existing forests depends on grading, forest density and exposure to the winds. A house sited 20'-50' from the forest with a properly maintained buffer has a much greater chance of survival. Dead or dry grass should be mowed close, dead sticks and limbs should be removed as well as pine needles or dead leaves (but not thrown over the fence onto the Parkway's land – compost it and help your garden!).

You would not want a dead or dying tree looming over your roof ready to break at the next strong gust of wind and come crashing down destroying all beneath it; neither does the Parkway. When grading your site be careful of trees that border the Parkway and of their root systems. A tree's roots can reach up to 2 - 3 times beyond the dripline. Cutting or mauling the roots will set up a terrible situation that can be avoided. Set your construction far enough away from the Park boundary to reduce damage to the roots of Park trees. All excavation should be kept outside the dripline to minimize root damage.





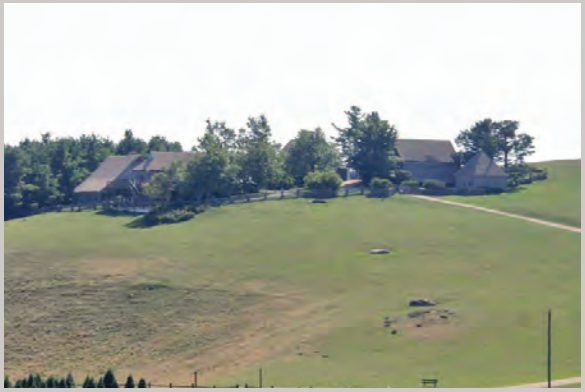
Garden trespasses on Parkway land.



Be aware of Parkway boundary.



Considerate design done right. Skylark Farms, owned by Washington and Lee Foundation, positively contributes to the landscape as approached, at milepost 29. Developed as a retreat in the 1970s, decades before these guidelines were composed, it exemplifies the siting sensitivity of the highland farm with some details of Highland Resort, and some details of Highland Farmhouse style. The detail image below is taken from the same scene shown above.

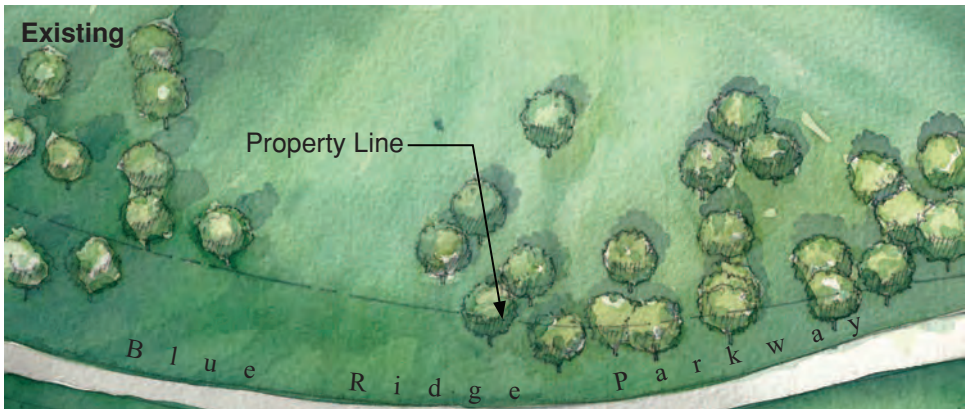


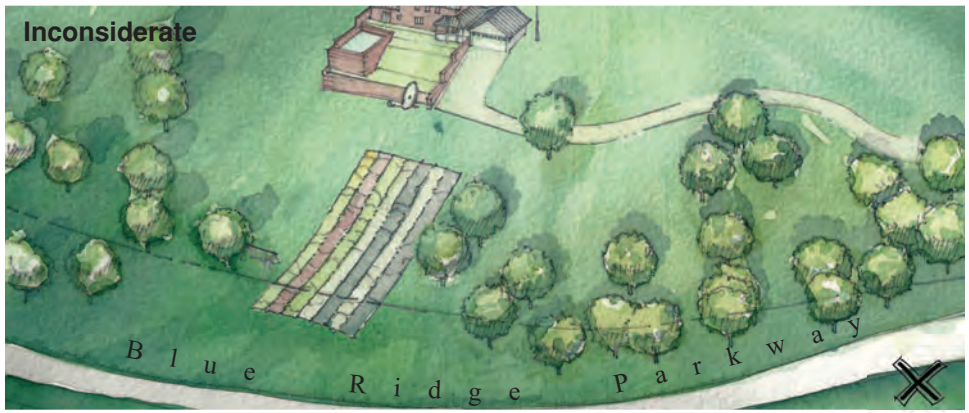
Maintaining your property in a scenic setting is a prerogative that few will argue with. In doing so, a lot of time and money are invested to generate dividends of beauty and order. Just as you would not be pleased if your neighbors wandered in and out of your carefully managed retreat without warning, the Parkway has designated specific entrances and trails. To minimize intrusiveness, do not lay out and create new trails in and around Park land.

Resisting the Temptation to Adopt across the Border

Though your home may have its own aesthetic, the Parkway does not want or intend the same for its land. Weeding, pruning, raking, mowing or any other detailed maintenance is unnecessary and harmful on the Blue Ridge Parkway land. Please stop your efforts at your boundary. That nature is alive and well across the property line on the Parkway's side does not license you or anyone to augment that process. Compost, yard waste and natural detritus from your property stay on your property or go to the landfill. Unnaturally accelerating or altering the Parkway lands' natural processes can have negative effects for everyone in the neighborhood.

Finally, like all good neighbors, educate your fellow neighbors about this landmark, and dissuade them from their own transgressions. This way, the integrity of the entire park can be maintained and enjoyed by future generations.







Considerate Design

Sometimes a picture is worth a thousand words. These graphics illustrate some differences between a considerate design and an inconsiderate design.

These two examples each site a house on a property. The inconsiderate design centers the building in the vista, uses incompatible materials and forms, such as red brick and neoclassical building and wall details. The design also leaves a big road cut on the way to the Parkway-facing garage, and is inconsiderate in its careless location of aboveground utilities and satellite reception dish, swings, and garden.

The considerate design sites the building as far out of the vista as possible, allowing the residents to enjoy the vista. It uses forms and colors consistent with the guidelines, and locates recreational and gardening structures out of the view of the Parkway.

The images to the left depict the existing vegetation and topography, and the considerate and inconsiderate approach toward development. The top image is the existing site. The middle image demonstrates the drastic change to the landscape and viewsheds. The garden protrudes beyond the property line while the added structures wrestle attention away from the natural beauty of the Blue Ridge Parkway. This design diminishes the majestic aspects that bring people to visit and live along the Blue Ridge Parkway.

The bottom image demonstrates reverence for the natural beauty of the Blue Ridge Parkway's landscape. This considerate planning of buildings, utilities, and entries allow not only motorist to continually enjoy the Parkway, but it also allows the homeowner to wake each morning and live a life in tune with the character of place that brought them there.

The images to the left side of page 6.7 display Parkway views of the inconsiderate design. The structures dominate the once scenic vista. The garage door, satellite dish, and utility line muddle any semblance of Parkway character. These views further demonstrate how one can development themselves out of the Blue Ridge market by destroying what the Blue Ridge has to market.

The images on the right of page 6.7 display the considerate design. There the house contributes to the natural viewshed.



Inconsiderate Design



Considerate Design



Inconsiderate Design



Considerate Design

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